

Appendix A
Reference Case

Table A1. Total Energy Supply and Disposition Summary
(Quadrillion Btu per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Production								
Crude Oil and Lease Condensate	10.99	10.80	12.76	13.25	13.40	12.99	12.04	0.5%
Natural Gas Plant Liquids	2.33	2.36	2.27	2.29	2.31	2.17	2.11	-0.5%
Dry Natural Gas	18.60	19.04	19.85	20.08	20.24	20.17	20.00	0.2%
Coal ¹	23.19	23.79	23.97	24.48	25.20	26.85	28.63	0.8%
Nuclear Power	8.16	8.21	8.31	8.41	9.05	9.50	9.57	0.6%
Hydropower	2.70	2.89	2.92	2.99	3.00	3.00	3.00	0.2%
Biomass ²	2.79	2.94	4.05	5.12	6.42	8.00	8.12	4.3%
Other Renewable Energy ³	0.67	0.88	1.51	1.75	2.00	2.25	2.45	4.4%
Other ⁴	0.36	0.50	0.54	0.58	0.58	0.61	0.64	1.1%
Total	69.80	71.41	76.17	78.96	82.21	85.53	86.56	0.8%
Imports								
Crude Oil	22.09	22.08	21.14	21.80	21.58	22.38	24.41	0.4%
Liquid Fuels and Other Petroleum ⁵	7.23	7.21	5.61	5.34	5.43	5.28	5.44	-1.2%
Natural Gas	4.45	4.29	4.80	5.12	4.68	4.63	4.64	0.3%
Other Imports ⁶	0.85	0.98	0.95	1.04	1.93	2.23	2.74	4.4%
Total	34.62	34.57	32.49	33.31	33.62	34.52	37.22	0.3%
Exports								
Petroleum ⁷	2.32	2.60	2.82	2.91	2.98	3.17	3.33	1.0%
Natural Gas	0.74	0.73	0.84	0.97	1.02	1.25	1.36	2.6%
Coal	1.27	1.26	1.79	1.14	0.87	0.90	0.88	-1.5%
Total	4.32	4.59	5.45	5.03	4.87	5.32	5.56	0.8%
Discrepancy⁸	0.01	1.87	-0.13	-0.01	0.12	0.19	0.21	--
Consumption								
Liquid Fuels and Other Petroleum ⁹	40.47	40.06	40.46	41.80	42.24	42.78	43.99	0.4%
Natural Gas	22.65	22.30	23.93	24.35	24.01	23.66	23.39	0.2%
Coal ¹⁰	22.78	22.50	23.03	24.19	25.87	27.75	29.90	1.2%
Nuclear Power	8.16	8.21	8.31	8.41	9.05	9.50	9.57	0.6%
Hydropower	2.70	2.89	2.92	2.99	3.00	3.00	3.00	0.2%
Biomass ¹¹	2.45	2.50	3.01	3.60	4.50	5.42	5.51	3.3%
Other Renewable Energy ³	0.67	0.88	1.51	1.75	2.00	2.25	2.45	4.4%
Other ¹²	0.21	0.19	0.18	0.17	0.17	0.18	0.20	0.3%
Total	100.08	99.52	103.34	107.26	110.85	114.54	118.01	0.7%

Reference Case

Table A1. Total Energy Supply and Disposition Summary (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Prices (2006 dollars per unit)								
Petroleum (dollars per barrel)								
Imported Low Sulfur Light Crude Oil Price ¹³ . . .	58.28	66.02	74.03	59.85	59.70	64.49	70.45	0.3%
Imported Crude Oil Price ¹³	50.40	59.05	65.18	52.03	51.55	55.68	58.66	-0.0%
Natural Gas (dollars per million Btu)								
Price at Henry Hub	8.93	6.73	6.90	5.87	5.95	6.39	7.22	0.3%
Wellhead Price ¹⁴	7.62	6.24	6.16	5.21	5.29	5.69	6.45	0.1%
Natural Gas (dollars per thousand cubic feet)								
Wellhead Price ¹⁴	7.85	6.42	6.33	5.36	5.44	5.86	6.63	0.1%
Coal (dollars per ton)								
Minemouth Price ¹⁵	24.08	24.63	26.16	23.38	22.51	22.75	23.32	-0.2%
Coal (dollars per million Btu)								
Minemouth Price ¹⁵	1.18	1.21	1.28	1.17	1.14	1.16	1.19	-0.1%
Average Delivered Price ¹⁶	1.67	1.78	1.93	1.80	1.77	1.78	1.82	0.1%
Average Electricity Price (cents per kilowatthour)	8.4	8.9	9.2	8.5	8.6	8.7	8.8	-0.0%

¹Includes waste coal.

²Includes grid-connected electricity from wood and waste; biomass, such as corn, used for liquid fuels production; and non-electric energy demand from wood. Refer to Table A17 for details.

³Includes grid-connected electricity from landfill gas; biogenic municipal waste; wind; photovoltaic and solar thermal sources; and non-electric energy from renewable sources, such as active and passive solar systems. Excludes electricity imports using renewable sources and nonmarketed renewable energy. See Table A17 for selected nonmarketed residential and commercial renewable energy.

⁴Includes non-biogenic municipal waste, liquid hydrogen, methanol, and some domestic inputs to refineries.

⁵Includes imports of finished petroleum products, unfinished oils, alcohols, ethers, blending components, and renewable fuels such as ethanol.

⁶Includes coal, coal coke (net), and electricity (net).

⁷Includes crude oil and petroleum products.

⁸Balancing item. Includes unaccounted for supply, losses, gains, and net storage withdrawals.

⁹Includes petroleum-derived fuels and non-petroleum derived fuels, such as ethanol, biodiesel, and coal-based synthetic liquids. Petroleum coke, which is a solid, is included. Also included are natural gas plant liquids, crude oil consumed as a fuel, and liquid hydrogen. Refer to Table A17 for detailed renewable liquid fuels consumption.

¹⁰Excludes coal converted to coal-based synthetic liquids.

¹¹Includes grid-connected electricity from wood and wood waste, non-electric energy from wood, and biofuels heat and coproducts used in the production of liquid fuels, but excludes the energy content of the liquid fuels.

¹²Includes non-biogenic municipal waste and net electricity imports.

¹³Weighted average price delivered to U.S. refiners.

¹⁴Represents lower 48 onshore and offshore supplies.

¹⁵Includes reported prices for both open market and captive mines.

¹⁶Prices weighted by consumption; weighted average excludes residential and commercial prices, and export free-alongside-ship (f.a.s.) prices.

Btu = British thermal unit.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 natural gas supply values: Energy Information Administration (EIA), *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2006 natural gas supply values and natural gas wellhead price: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). 2005 natural gas wellhead price: Minerals Management Service and EIA, *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2005 and 2006 coal minemouth and delivered coal prices: EIA, *Annual Coal Report 2006*, DOE/EIA-0584(2006) (Washington, DC, November 2007). 2006 petroleum supply values and 2005 crude oil and lease condensate production: EIA, *Petroleum Supply Annual 2006*, DOE/EIA-0340(2006)/1 (Washington, DC, September 2007). Other 2005 petroleum supply values: EIA, *Petroleum Supply Annual 2005*, DOE/EIA-0340(2005)/1 (Washington, DC, October 2006). 2005 and 2006 low sulfur light crude oil price: EIA, Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report." Other 2005 and 2006 coal values: *Quarterly Coal Report, October-December 2006*, DOE/EIA-0121(2006/4Q) (Washington, DC, March 2007). Other 2005 and 2006 values: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). **Projections:** EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A2. Energy Consumption by Sector and Source
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Energy Consumption								
Residential								
Liquefied Petroleum Gases	0.50	0.47	0.48	0.50	0.52	0.54	0.55	0.7%
Kerosene	0.09	0.07	0.08	0.08	0.08	0.08	0.08	0.5%
Distillate Fuel Oil	0.85	0.70	0.75	0.75	0.73	0.69	0.65	-0.3%
Liquid Fuels and Other Petroleum Subtotal .	1.45	1.25	1.31	1.33	1.33	1.31	1.29	0.1%
Natural Gas	4.97	4.50	4.95	5.16	5.30	5.35	5.32	0.7%
Coal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.4%
Renewable Energy ¹	0.45	0.41	0.44	0.42	0.40	0.39	0.38	-0.3%
Electricity	4.64	4.61	4.95	5.02	5.25	5.53	5.88	1.0%
Delivered Energy	11.52	10.77	11.66	11.95	12.30	12.58	12.88	0.7%
Electricity Related Losses	10.12	10.04	10.59	10.61	11.08	11.57	12.14	0.8%
Total	21.64	20.82	22.25	22.56	23.39	24.15	25.01	0.8%
Commercial								
Liquefied Petroleum Gases	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.6%
Motor Gasoline ²	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.4%
Kerosene	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.2%
Distillate Fuel Oil	0.45	0.42	0.38	0.41	0.41	0.42	0.41	-0.0%
Residual Fuel Oil	0.12	0.11	0.10	0.10	0.10	0.10	0.10	-0.4%
Liquid Fuels and Other Petroleum Subtotal .	0.72	0.68	0.63	0.67	0.68	0.68	0.68	0.0%
Natural Gas	3.09	2.92	3.04	3.29	3.47	3.63	3.78	1.1%
Coal	0.09	0.08	0.08	0.08	0.08	0.08	0.08	-0.1%
Renewable Energy ³	0.13	0.13	0.13	0.13	0.13	0.13	0.13	-
Electricity	4.35	4.43	4.73	5.19	5.67	6.15	6.62	1.7%
Delivered Energy	8.38	8.25	8.62	9.37	10.03	10.67	11.30	1.3%
Electricity Related Losses	9.50	9.66	10.12	10.98	11.96	12.87	13.68	1.5%
Total	17.87	17.91	18.74	20.34	21.98	23.54	24.98	1.4%
Industrial⁴								
Liquefied Petroleum Gases	2.07	2.09	2.12	1.97	1.83	1.74	1.71	-0.8%
Motor Gasoline ²	0.37	0.38	0.38	0.37	0.37	0.38	0.38	0.1%
Distillate Fuel Oil	1.26	1.28	1.29	1.25	1.23	1.22	1.23	-0.2%
Residual Fuel Oil	0.28	0.28	0.28	0.25	0.23	0.23	0.23	-0.9%
Petrochemical Feedstocks	1.41	1.41	1.36	1.45	1.39	1.33	1.29	-0.4%
Other Petroleum ⁵	4.39	4.48	4.25	4.30	4.22	4.25	4.41	-0.1%
Liquid Fuels and Other Petroleum Subtotal .	9.79	9.92	9.67	9.60	9.27	9.15	9.25	-0.3%
Natural Gas	6.79	6.68	7.16	7.21	7.14	7.17	7.08	0.2%
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-
Lease and Plant Fuel ⁶	1.14	1.17	1.21	1.22	1.25	1.27	1.27	0.3%
Natural Gas Subtotal	7.93	7.85	8.37	8.43	8.39	8.44	8.35	0.3%
Metallurgical Coal	0.62	0.60	0.60	0.54	0.54	0.52	0.48	-0.9%
Other Industrial Coal	1.28	1.26	1.31	1.22	1.20	1.19	1.18	-0.3%
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.13	0.34	0.39	0.55	-
Net Coal Coke Imports	0.04	0.06	0.03	0.03	0.04	0.04	0.04	-1.8%
Coal Subtotal	1.94	1.92	1.93	1.92	2.11	2.14	2.26	0.7%
Biofuels Heat and Coproducts	0.24	0.30	0.67	1.00	1.49	2.28	2.31	8.9%
Renewable Energy ⁷	1.64	1.69	1.66	1.75	1.83	1.93	2.02	0.7%
Electricity	3.48	3.42	3.50	3.61	3.59	3.55	3.52	0.1%
Delivered Energy	25.03	25.10	25.82	26.31	26.70	27.50	27.70	0.4%
Electricity Related Losses	7.59	7.45	7.50	7.63	7.57	7.43	7.28	-0.1%
Total	32.62	32.55	33.32	33.93	34.27	34.93	34.98	0.3%

Reference Case

Table A2. Energy Consumption by Sector and Source (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Transportation								
Liquefied Petroleum Gases	0.01	0.02	0.02	0.01	0.01	0.01	0.01	-1.0%
E85 ⁸	0.00	0.00	0.00	0.18	0.97	1.42	1.34	33.5%
Motor Gasoline ²	17.02	17.20	17.25	17.46	16.56	15.83	15.97	-0.3%
Jet Fuel ⁹	3.22	3.16	3.44	3.82	4.15	4.48	4.79	1.8%
Distillate Fuel Oil ¹⁰	5.99	6.18	6.54	7.13	7.63	8.25	8.98	1.6%
Residual Fuel Oil	0.83	0.83	0.85	0.85	0.86	0.86	0.87	0.2%
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.8%
Other Petroleum ¹¹	0.19	0.18	0.17	0.18	0.18	0.18	0.18	0.0%
Liquid Fuels and Other Petroleum Subtotal ..	27.26	27.57	28.29	29.63	30.37	31.03	32.15	0.6%
Pipeline Fuel Natural Gas	0.60	0.59	0.64	0.66	0.69	0.72	0.72	0.8%
Compressed Natural Gas	0.02	0.02	0.04	0.06	0.07	0.08	0.08	6.0%
Electricity	0.02	0.02	0.02	0.02	0.03	0.03	0.03	1.3%
Delivered Energy	27.90	28.20	28.98	30.37	31.15	31.86	32.98	0.7%
Electricity Related Losses	0.05	0.05	0.05	0.05	0.06	0.06	0.06	1.1%
Total	27.95	28.25	29.03	30.42	31.21	31.92	33.04	0.7%
Delivered Energy Consumption for All Sectors								
Liquefied Petroleum Gases	2.68	2.65	2.70	2.57	2.45	2.39	2.37	-0.5%
E85 ⁸	0.00	0.00	0.00	0.18	0.97	1.42	1.34	33.5%
Motor Gasoline ²	17.44	17.62	17.68	17.89	16.99	16.26	16.40	-0.3%
Jet Fuel ⁹	3.22	3.16	3.44	3.82	4.15	4.48	4.79	1.8%
Kerosene	0.14	0.11	0.12	0.12	0.13	0.13	0.13	0.4%
Distillate Fuel Oil	8.56	8.59	8.97	9.55	10.00	10.58	11.28	1.1%
Residual Fuel Oil	1.22	1.23	1.23	1.21	1.19	1.19	1.20	-0.1%
Petrochemical Feedstocks	1.41	1.41	1.36	1.45	1.39	1.33	1.29	-0.4%
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.8%
Other Petroleum ¹²	4.55	4.64	4.40	4.45	4.38	4.41	4.56	-0.1%
Liquid Fuels and Other Petroleum Subtotal ..	39.23	39.41	39.90	41.23	41.65	42.17	43.37	0.4%
Natural Gas	14.86	14.12	15.19	15.72	15.98	16.22	16.27	0.6%
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Lease and Plant Fuel ⁶	1.14	1.17	1.21	1.22	1.25	1.27	1.27	0.3%
Pipeline Natural Gas	0.60	0.59	0.64	0.66	0.69	0.72	0.72	0.8%
Natural Gas Subtotal	16.61	15.88	17.04	17.60	17.93	18.22	18.26	0.6%
Metallurgical Coal	0.62	0.60	0.60	0.54	0.54	0.52	0.48	-0.9%
Other Coal	1.38	1.35	1.40	1.31	1.29	1.28	1.27	-0.3%
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.13	0.34	0.39	0.55	--
Net Coal Coke Imports	0.04	0.06	0.03	0.03	0.04	0.04	0.04	-1.8%
Coal Subtotal	2.04	2.01	2.03	2.01	2.21	2.23	2.35	0.6%
Biofuels Heat and Coproducts	0.24	0.30	0.67	1.00	1.49	2.28	2.31	8.9%
Renewable Energy ¹³	2.22	2.23	2.23	2.29	2.37	2.45	2.52	0.5%
Electricity	12.49	12.49	13.20	13.85	14.54	15.26	16.05	1.1%
Delivered Energy	72.82	72.32	75.08	77.99	80.18	82.61	84.86	0.7%
Electricity Related Losses	27.26	27.19	28.26	29.27	30.67	31.93	33.16	0.8%
Total	100.08	99.52	103.34	107.26	110.85	114.54	118.01	0.7%
Electric Power¹⁴								
Distillate Fuel Oil	0.21	0.18	0.18	0.18	0.20	0.21	0.23	0.9%
Residual Fuel Oil	1.03	0.46	0.38	0.39	0.39	0.40	0.40	-0.6%
Liquid Fuels and Other Petroleum Subtotal ..	1.24	0.64	0.56	0.57	0.59	0.61	0.63	-0.1%
Natural Gas	6.04	6.42	6.89	6.75	6.09	5.45	5.13	-0.9%
Steam Coal	20.74	20.48	21.01	22.18	23.67	25.51	27.55	1.2%
Nuclear Power	8.16	8.21	8.31	8.41	9.05	9.50	9.57	0.6%
Renewable Energy ¹⁵	3.49	3.74	4.53	5.05	5.64	5.94	6.13	2.1%
Electricity Imports	0.08	0.06	0.05	0.04	0.04	0.05	0.08	1.0%
Total¹⁶	39.73	39.68	41.46	43.12	45.21	47.19	49.21	0.9%

Table A2. Energy Consumption by Sector and Source (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Total Energy Consumption								
Liquefied Petroleum Gases	2.68	2.65	2.70	2.57	2.45	2.39	2.37	-0.5%
E85 ⁹	0.00	0.00	0.00	0.18	0.97	1.42	1.34	33.5%
Motor Gasoline ²	17.44	17.62	17.68	17.89	16.99	16.26	16.40	-0.3%
Jet Fuel ⁹	3.22	3.16	3.44	3.82	4.15	4.48	4.79	1.8%
Kerosene	0.14	0.11	0.12	0.12	0.13	0.13	0.13	0.4%
Distillate Fuel Oil	8.76	8.77	9.15	9.73	10.20	10.79	11.51	1.1%
Residual Fuel Oil	2.26	1.69	1.60	1.59	1.58	1.59	1.60	-0.2%
Petrochemical Feedstocks	1.41	1.41	1.36	1.45	1.39	1.33	1.29	-0.4%
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.8%
Other Petroleum ¹²	4.55	4.64	4.40	4.45	4.38	4.41	4.56	-0.1%
Liquid Fuels and Other Petroleum Subtotal	40.47	40.06	40.46	41.80	42.24	42.78	43.99	0.4%
Natural Gas	20.90	20.54	22.08	22.47	22.07	21.67	21.40	0.2%
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Lease and Plant Fuel ⁶	1.14	1.17	1.21	1.22	1.25	1.27	1.27	0.3%
Pipeline Natural Gas	0.60	0.59	0.64	0.66	0.69	0.72	0.72	0.8%
Natural Gas Subtotal	22.65	22.30	23.93	24.35	24.01	23.66	23.39	0.2%
Metallurgical Coal	0.62	0.60	0.60	0.54	0.54	0.52	0.48	-0.9%
Other Coal	22.12	21.83	22.41	23.49	24.96	26.79	28.82	1.2%
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.13	0.34	0.39	0.55	--
Net Coal Coke Imports	0.04	0.06	0.03	0.03	0.04	0.04	0.04	-1.8%
Coal Subtotal	22.78	22.49	23.03	24.19	25.87	27.75	29.90	1.2%
Nuclear Power	8.16	8.21	8.31	8.41	9.05	9.50	9.57	0.6%
Biofuels Heat and Coproducts	0.24	0.30	0.67	1.00	1.49	2.28	2.31	8.9%
Renewable Energy ¹⁷	5.71	5.97	6.76	7.34	8.01	8.39	8.66	1.6%
Electricity Imports	0.08	0.06	0.05	0.04	0.04	0.05	0.08	1.0%
Total	100.08	99.52	103.34	107.26	110.85	114.54	118.01	0.7%
Energy Use and Related Statistics								
Delivered Energy Use	72.82	72.32	75.08	77.99	80.18	82.61	84.86	0.7%
Total Energy Use	100.08	99.52	103.34	107.26	110.85	114.54	118.01	0.7%
Ethanol Consumed in Motor Gasoline and E85	0.34	0.47	1.05	1.34	1.82	2.06	2.01	6.2%
Population (millions)	297.34	300.13	310.85	324.29	337.74	351.41	365.59	0.8%
Gross Domestic Product (billion 2000 dollars)	11004	11319	12453	14199	15984	17951	20219	2.4%
Carbon Dioxide Emissions (million metric tons)	5981.5	5890.3	6010.6	6226.2	6384.1	6570.6	6851.0	0.6%

¹Includes wood used for residential heating. See Table A4 and/or Table A17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

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

³Excludes ethanol. Includes commercial sector consumption of wood and wood waste, landfill gas, municipal waste, and other biomass for combined heat and power. See Table A5 and/or Table A17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

⁴Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

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

⁶Represents natural gas used in well, field, and lease operations, and in natural gas processing plant machinery.

⁷Includes consumption of energy produced from hydroelectric, wood and wood waste, municipal waste, and other biomass sources. Excludes ethanol blends (10 percent or less) in motor gasoline.

⁸E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

⁹Includes only kerosene type.

¹⁰Diesel fuel for on- and off- road use.

¹¹Includes aviation gasoline and lubricants.

¹²Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

¹³Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes ethanol and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

¹⁴Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

¹⁵Includes conventional hydroelectric, geothermal, wood and wood waste, biogenic municipal waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

¹⁶Includes non-biogenic municipal waste not included above.

¹⁷Includes conventional hydroelectric, geothermal, wood and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic and solar thermal sources. Includes petroleum coke used in the electric power sector. Excludes ethanol, net electricity imports, and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2005 and 2006 consumption based on: Energy Information Administration (EIA), *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 and 2006 population and gross domestic product: Global Insight, Global Insight Industry and Employment models, July 2007. 2005 and 2006 carbon dioxide emissions: EIA, *Emissions of Greenhouse Gases in the United States 2006*, DOE/EIA-0573(2006) (Washington, DC, November 2007).

Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A3. Energy Prices by Sector and Source
(2006 Dollars per Million Btu, Unless Otherwise Noted)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Residential								
Liquefied Petroleum Gases	18.83	23.08	25.21	24.15	24.23	24.63	25.43	0.4%
Distillate Fuel Oil	16.98	17.94	17.21	14.27	14.27	15.14	16.27	-0.4%
Natural Gas	12.85	13.40	12.15	11.20	11.39	11.94	12.91	-0.2%
Electricity	28.52	30.52	31.37	30.04	30.20	30.33	30.63	0.0%
Commercial								
Distillate Fuel Oil	13.82	14.59	15.24	12.88	13.24	13.88	15.00	0.1%
Residual Fuel Oil	11.21	8.60	10.06	7.95	7.95	8.62	9.22	0.3%
Natural Gas	11.53	11.50	10.59	9.68	9.91	10.47	11.43	-0.0%
Electricity	26.12	27.75	27.89	25.52	25.64	25.71	26.17	-0.2%
Industrial¹								
Liquefied Petroleum Gases	17.54	19.71	17.74	16.65	16.79	17.10	17.79	-0.4%
Distillate Fuel Oil	14.50	15.33	15.72	13.95	14.62	15.10	16.26	0.2%
Residual Fuel Oil	10.43	9.06	10.86	8.24	8.29	9.00	9.62	0.2%
Natural Gas ²	8.37	7.66	7.21	6.15	6.21	6.56	7.29	-0.2%
Metallurgical Coal	3.29	3.54	4.07	3.53	3.42	3.51	3.60	0.1%
Other Industrial Coal	2.22	2.34	2.42	2.31	2.28	2.30	2.33	-0.0%
Coal for Liquids	--	--	--	0.96	1.09	1.17	1.30	--
Electricity	17.25	17.97	19.21	17.22	17.27	17.30	17.63	-0.1%
Transportation								
Liquefied Petroleum Gases ³	20.49	21.72	26.03	24.93	24.94	25.28	26.03	0.8%
E85 ⁴	23.89	24.81	23.58	17.61	18.15	18.50	19.62	-1.0%
Motor Gasoline ⁵	19.28	21.19	21.23	18.80	19.64	19.67	20.37	-0.2%
Jet Fuel ⁶	13.30	14.83	15.77	13.16	13.27	14.15	15.37	0.1%
Diesel Fuel (distillate fuel oil) ⁷	18.09	19.72	19.68	17.65	18.26	18.54	19.59	-0.0%
Residual Fuel Oil	8.68	7.89	10.53	8.56	8.69	9.50	10.39	1.2%
Natural Gas ⁸	14.55	14.28	13.60	12.34	12.15	12.28	12.83	-0.4%
Electricity	30.79	29.73	30.95	28.95	29.05	28.95	29.65	-0.0%
Electric Power⁹								
Distillate Fuel Oil	12.62	13.35	13.62	10.67	10.69	11.59	12.71	-0.2%
Residual Fuel Oil	7.40	8.17	9.45	7.41	7.50	8.25	9.04	0.4%
Natural Gas	8.44	6.87	6.96	5.93	5.95	6.26	6.93	0.0%
Steam Coal	1.59	1.69	1.84	1.74	1.72	1.74	1.78	0.2%
Average Price to All Users¹⁰								
Liquefied Petroleum Gases	17.75	20.35	19.27	18.32	18.59	19.03	19.82	-0.1%
E85 ⁴	23.89	24.81	23.58	17.61	18.15	18.50	19.62	-1.0%
Motor Gasoline ⁵	19.18	21.06	21.23	18.80	19.64	19.67	20.37	-0.1%
Jet Fuel	13.30	14.83	15.77	13.16	13.27	14.15	15.37	0.1%
Distillate Fuel Oil	17.11	18.56	18.48	16.57	17.20	17.62	18.74	0.0%
Residual Fuel Oil	8.44	8.21	10.31	8.19	8.29	9.06	9.87	0.8%
Natural Gas	9.93	9.22	8.72	7.78	7.98	8.49	9.36	0.1%
Metallurgical Coal	3.29	3.54	4.07	3.53	3.42	3.51	3.60	0.1%
Other Coal	1.63	1.73	1.88	1.77	1.75	1.77	1.81	0.2%
Coal for Liquids	--	--	--	0.96	1.09	1.17	1.30	--
Electricity	24.55	26.10	26.90	25.00	25.23	25.43	25.93	-0.0%

Table A3. Energy Prices by Sector and Source (Continued)
(2006 Dollars per Million Btu, Unless Otherwise Noted)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Non-Renewable Energy Expenditures by Sector (billion 2006 dollars)								
Residential	221.30	225.38	241.71	232.60	243.22	256.33	274.70	0.8%
Commercial	159.35	166.54	174.38	173.76	189.37	206.24	227.37	1.3%
Industrial	203.06	205.11	224.65	197.41	193.16	194.97	203.93	-0.0%
Transportation	489.23	542.63	560.74	514.93	530.80	539.68	587.86	0.3%
Total Non-Renewable Expenditures	1072.94	1139.66	1201.48	1118.69	1156.54	1197.22	1293.86	0.5%
Transportation Renewable Expenditures	0.03	0.03	0.06	3.14	17.64	26.21	26.35	32.2%
Total Expenditures	1072.96	1139.70	1201.54	1121.83	1174.18	1223.43	1320.22	0.6%

¹Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

²Excludes use for lease and plant fuel.

³Includes Federal and State taxes while excluding county and local taxes.

⁴E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

⁵Sales weighted-average price for all grades. Includes Federal, State and local taxes.

⁶Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.

⁷Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.

⁸Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes and estimated dispensing costs or charges.

⁹Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.

¹⁰Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.

Btu = British thermal unit.

-- = Not applicable.

Note: Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 prices for motor gasoline, distillate fuel oil, and jet fuel are based on prices in the Energy Information Administration (EIA), *Petroleum Marketing Annual 2006*, DOE/EIA-0487(2006) (Washington, DC, August 2007). 2005 residential and commercial natural gas delivered prices: EIA, *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2006 residential and commercial natural gas delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). 2005 and 2006 industrial natural gas delivered prices are estimated based on: EIA, *Manufacturing Energy Consumption Survey 1994* and industrial and wellhead prices from the *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006) and the *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). 2005 transportation sector natural gas delivered prices are based on: EIA, *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006) and estimated state taxes, federal taxes, and dispensing costs or charges. 2006 transportation sector natural gas delivered prices are model results. 2005 and 2006 electric power sector natural gas prices: EIA, *Electric Power Monthly*, DOE/EIA-0226, May 2003 through April 2004, Table 4.11.A. 2005 and 2006 coal prices based on: EIA, *Quarterly Coal Report, October-December 2006*, DOE/EIA-0121(2006/4Q) (Washington, DC, March 2007) and EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F. 2005 and 2006 electricity prices: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 and 2006 E85 prices derived from monthly prices in the Clean Cities Alternative Fuel Price Report. **Projections:** EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A4. Residential Sector Key Indicators and Consumption
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Key Indicators								
Households (millions)								
Single-Family	79.65	80.81	83.48	88.66	93.38	97.49	101.28	0.9%
Multifamily	24.49	24.81	25.86	27.42	29.05	30.69	32.44	1.1%
Mobile Homes	6.94	6.89	6.67	6.65	6.73	6.78	6.86	-0.0%
Total	111.09	112.51	116.00	122.73	129.15	134.96	140.58	0.9%
Average House Square Footage	1802	1815	1858	1916	1965	2008	2046	0.5%
Energy Intensity								
(million Btu per household)								
Delivered Energy Consumption	103.7	95.8	100.5	97.3	95.3	93.2	91.6	-0.2%
Total Energy Consumption	194.8	185.0	191.8	183.8	181.1	179.0	177.9	-0.2%
(thousand Btu per square foot)								
Delivered Energy Consumption	57.5	52.8	54.1	50.8	48.5	46.4	44.8	-0.7%
Total Energy Consumption	108.1	101.9	103.2	95.9	92.1	89.1	87.0	-0.7%
Delivered Energy Consumption by Fuel								
Electricity								
Space Heating	0.31	0.27	0.30	0.32	0.32	0.33	0.33	0.8%
Space Cooling	0.82	0.75	0.79	0.85	0.91	0.97	1.04	1.4%
Water Heating	0.38	0.38	0.38	0.40	0.42	0.43	0.43	0.5%
Refrigeration	0.39	0.39	0.37	0.36	0.37	0.38	0.39	0.0%
Cooking	0.10	0.10	0.11	0.12	0.12	0.13	0.14	1.2%
Clothes Dryers	0.25	0.25	0.25	0.26	0.27	0.28	0.30	0.6%
Freezers	0.08	0.08	0.08	0.08	0.09	0.10	0.11	1.3%
Lighting	0.73	0.74	0.72	0.55	0.51	0.47	0.49	-1.7%
Clothes Washers ¹	0.03	0.04	0.03	0.03	0.03	0.03	0.03	-1.1%
Dishwashers ¹	0.10	0.10	0.09	0.09	0.10	0.10	0.11	0.4%
Color Televisions and Set-Top Boxes	0.30	0.33	0.39	0.40	0.43	0.48	0.55	2.2%
Personal Computers	0.07	0.07	0.10	0.11	0.12	0.14	0.16	3.6%
Furnace Fans	0.06	0.05	0.06	0.07	0.07	0.08	0.08	1.6%
Other Uses ²	1.01	1.05	1.26	1.37	1.49	1.61	1.73	2.1%
Delivered Energy	4.64	4.61	4.95	5.02	5.25	5.53	5.88	1.0%
Natural Gas								
Space Heating	3.59	3.13	3.57	3.73	3.83	3.87	3.88	0.9%
Space Cooling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.1%
Water Heating	1.09	1.08	1.08	1.12	1.15	1.14	1.09	0.1%
Cooking	0.22	0.22	0.22	0.24	0.25	0.26	0.26	0.8%
Clothes Dryers	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.6%
Delivered Energy	4.97	4.50	4.95	5.16	5.30	5.35	5.32	0.7%
Distillate Fuel Oil								
Space Heating	0.75	0.60	0.66	0.66	0.65	0.62	0.59	-0.1%
Water Heating	0.11	0.10	0.09	0.09	0.08	0.08	0.07	-1.8%
Delivered Energy	0.85	0.70	0.75	0.75	0.73	0.69	0.65	-0.3%
Liquefied Petroleum Gases								
Space Heating	0.26	0.23	0.24	0.24	0.24	0.23	0.23	0.0%
Water Heating	0.06	0.06	0.05	0.05	0.05	0.04	0.04	-1.1%
Cooking	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.3%
Other Uses ³	0.15	0.15	0.16	0.18	0.20	0.22	0.25	2.0%
Delivered Energy	0.50	0.47	0.48	0.50	0.52	0.54	0.55	0.7%
Marketed Renewables (wood) ⁴	0.45	0.41	0.44	0.42	0.40	0.39	0.38	-0.3%
Other Fuels ⁵	0.10	0.08	0.09	0.09	0.09	0.09	0.09	0.4%

Table A4. Residential Sector Key Indicators and Consumption (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Delivered Energy Consumption by End Use								
Space Heating	5.46	4.72	5.30	5.46	5.53	5.53	5.50	0.6%
Space Cooling	0.82	0.75	0.79	0.85	0.91	0.97	1.04	1.4%
Water Heating	1.64	1.62	1.61	1.66	1.70	1.69	1.63	0.0%
Refrigeration	0.39	0.39	0.37	0.36	0.37	0.38	0.39	0.0%
Cooking	0.35	0.35	0.36	0.38	0.41	0.42	0.43	0.9%
Clothes Dryers	0.32	0.33	0.33	0.34	0.35	0.36	0.38	0.6%
Freezers	0.08	0.08	0.08	0.08	0.09	0.10	0.11	1.3%
Lighting	0.73	0.74	0.72	0.55	0.51	0.47	0.49	-1.7%
Clothes Washers	0.03	0.04	0.03	0.03	0.03	0.03	0.03	-1.1%
Dishwashers	0.10	0.10	0.09	0.09	0.10	0.10	0.11	0.4%
Color Televisions and Set-Top Boxes	0.30	0.33	0.39	0.40	0.43	0.48	0.55	2.2%
Personal Computers	0.07	0.07	0.10	0.11	0.12	0.14	0.16	3.6%
Furnace Fans	0.06	0.05	0.06	0.07	0.07	0.08	0.08	1.6%
Other Uses ⁶	1.16	1.21	1.42	1.56	1.69	1.83	1.98	2.1%
Delivered Energy	11.52	10.77	11.66	11.95	12.30	12.58	12.88	0.7%
Electricity Related Losses	10.12	10.04	10.59	10.61	11.08	11.57	12.14	0.8%
Total Energy Consumption by End Use								
Space Heating	6.14	5.31	5.95	6.13	6.21	6.22	6.18	0.6%
Space Cooling	2.61	2.39	2.48	2.64	2.83	3.01	3.19	1.2%
Water Heating	2.47	2.44	2.43	2.51	2.59	2.59	2.52	0.1%
Refrigeration	1.26	1.24	1.15	1.12	1.14	1.16	1.20	-0.1%
Cooking	0.57	0.58	0.60	0.63	0.67	0.70	0.72	0.9%
Clothes Dryers	0.88	0.88	0.87	0.90	0.92	0.95	0.99	0.5%
Freezers	0.27	0.26	0.25	0.26	0.29	0.31	0.34	1.1%
Lighting	2.31	2.35	2.26	1.71	1.58	1.47	1.49	-1.9%
Clothes Washers	0.11	0.11	0.10	0.09	0.08	0.08	0.08	-1.2%
Dishwashers	0.31	0.30	0.29	0.29	0.30	0.31	0.33	0.3%
Color Televisions and Set-Top Boxes	0.95	1.05	1.23	1.26	1.33	1.49	1.69	2.0%
Personal Computers	0.21	0.21	0.30	0.34	0.38	0.43	0.48	3.5%
Furnace Fans	0.19	0.17	0.20	0.21	0.23	0.24	0.24	1.5%
Other Uses ⁶	3.37	3.50	4.13	4.46	4.84	5.19	5.55	1.9%
Total	21.64	20.82	22.25	22.56	23.39	24.15	25.01	0.8%
Nonmarketed Renewables⁷								
Geothermal Heat Pumps	0.00	0.00	0.00	0.01	0.01	0.01	0.01	6.1%
Solar Hot Water Heating	0.01	0.01	0.02	0.02	0.03	0.04	0.05	5.3%
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.01	16.9%
Total	0.01	0.02	0.02	0.03	0.04	0.05	0.07	5.9%

¹Does not include water heating portion of load.

²Includes small electric devices, heating elements, and motors not listed above.

³Includes such appliances as outdoor grills and mosquito traps.

⁴Includes wood used for primary and secondary heating in wood stoves or fireplaces as reported in the *Residential Energy Consumption Survey 2001*.

⁵Includes kerosene and coal.

⁶Includes all other uses listed above.

⁷Represents primary energy displaced.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 based on: Energy Information Administration (EIA), *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A5. Commercial Sector Key Indicators and Consumption
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Key Indicators								
Total Floorspace (billion square feet)								
Surviving	72.1	73.2	77.2	82.2	87.4	92.9	98.7	1.3%
New Additions	1.6	1.6	1.6	1.8	1.8	2.0	2.1	0.9%
Total	73.8	74.8	78.8	83.9	89.3	94.8	100.8	1.2%
Energy Consumption Intensity (thousand Btu per square foot)								
Delivered Energy Consumption	113.5	110.3	109.3	111.6	112.3	112.6	112.2	0.1%
Electricity Related Losses	128.8	129.1	128.4	130.8	134.0	135.7	135.8	0.2%
Total Energy Consumption	242.3	239.4	237.8	242.4	246.3	248.3	247.9	0.1%
Delivered Energy Consumption by Fuel								
Purchased Electricity								
Space Heating ¹	0.14	0.13	0.14	0.14	0.14	0.15	0.15	0.5%
Space Cooling ¹	0.52	0.51	0.50	0.52	0.55	0.58	0.61	0.8%
Water Heating ¹	0.16	0.16	0.15	0.16	0.16	0.16	0.16	0.1%
Ventilation	0.19	0.19	0.19	0.20	0.21	0.22	0.23	0.9%
Cooking	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-0.4%
Lighting	1.16	1.15	1.12	1.17	1.22	1.28	1.34	0.7%
Refrigeration	0.23	0.23	0.23	0.24	0.25	0.27	0.28	0.8%
Office Equipment (PC)	0.17	0.21	0.25	0.28	0.30	0.33	0.35	2.1%
Office Equipment (non-PC)	0.39	0.42	0.55	0.68	0.79	0.87	0.92	3.3%
Other Uses ²	1.34	1.39	1.55	1.77	2.01	2.26	2.54	2.5%
Delivered Energy	4.35	4.43	4.73	5.19	5.67	6.15	6.62	1.7%
Natural Gas								
Space Heating ¹	1.30	1.18	1.29	1.37	1.40	1.41	1.42	0.8%
Space Cooling ¹	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-0.2%
Water Heating ¹	0.56	0.55	0.54	0.60	0.65	0.70	0.73	1.2%
Cooking	0.23	0.23	0.24	0.27	0.29	0.31	0.33	1.5%
Other Uses ³	0.97	0.94	0.95	1.03	1.10	1.19	1.29	1.3%
Delivered Energy	3.09	2.92	3.04	3.29	3.47	3.63	3.78	1.1%
Distillate Fuel Oil								
Space Heating ¹	0.15	0.13	0.13	0.14	0.15	0.15	0.15	0.8%
Water Heating ¹	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.3%
Other Uses ⁴	0.25	0.25	0.20	0.22	0.22	0.21	0.21	-0.6%
Delivered Energy	0.45	0.42	0.38	0.41	0.41	0.42	0.41	-0.0%
Marketed Renewables (biomass)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	--
Other Fuels ⁵	0.36	0.34	0.33	0.34	0.35	0.35	0.35	0.1%
Delivered Energy Consumption by End Use								
Space Heating ¹	1.59	1.44	1.56	1.65	1.69	1.71	1.71	0.7%
Space Cooling ¹	0.55	0.53	0.52	0.54	0.57	0.60	0.63	0.8%
Water Heating ¹	0.77	0.75	0.74	0.81	0.86	0.91	0.94	0.9%
Ventilation	0.19	0.19	0.19	0.20	0.21	0.22	0.23	0.9%
Cooking	0.27	0.27	0.28	0.31	0.33	0.35	0.36	1.2%
Lighting	1.16	1.15	1.12	1.17	1.22	1.28	1.34	0.7%
Refrigeration	0.23	0.23	0.23	0.24	0.25	0.27	0.28	0.8%
Office Equipment (PC)	0.17	0.21	0.25	0.28	0.30	0.33	0.35	2.1%
Office Equipment (non-PC)	0.39	0.42	0.55	0.68	0.79	0.87	0.92	3.3%
Other Uses ⁶	3.05	3.05	3.17	3.49	3.81	4.15	4.53	1.7%
Delivered Energy	8.38	8.25	8.62	9.37	10.03	10.67	11.30	1.3%

Table A5. Commercial Sector Key Indicators and Consumption (Continued)
(Quadrillion Btu per Year, Unless Otherwise Noted)

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Electricity Related Losses	9.50	9.66	10.12	10.98	11.96	12.87	13.68	1.5%
Total Energy Consumption by End Use								
Space Heating ¹	1.90	1.73	1.86	1.95	1.99	2.02	2.02	0.7%
Space Cooling ¹	1.69	1.63	1.58	1.65	1.72	1.81	1.90	0.6%
Water Heating ¹	1.12	1.10	1.06	1.14	1.20	1.25	1.28	0.6%
Ventilation	0.60	0.60	0.60	0.62	0.65	0.68	0.71	0.7%
Cooking	0.36	0.35	0.36	0.39	0.41	0.42	0.43	0.9%
Lighting	3.69	3.66	3.52	3.63	3.79	3.96	4.12	0.5%
Refrigeration	0.73	0.73	0.73	0.75	0.79	0.82	0.86	0.6%
Office Equipment (PC)	0.56	0.68	0.80	0.86	0.93	1.02	1.08	1.9%
Office Equipment (non-PC)	1.24	1.34	1.73	2.11	2.46	2.68	2.81	3.1%
Other Uses ⁶	5.97	6.08	6.49	7.23	8.05	8.89	9.77	2.0%
Total	17.87	17.91	18.74	20.34	21.98	23.54	24.98	1.4%
Nonmarketed Renewable Fuels⁷								
Solar Thermal	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.5%
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.01	0.01	8.7%
Total	0.03	0.03	0.03	0.03	0.03	0.03	0.04	1.6%

¹Includes fuel consumption for district services.

²Includes miscellaneous uses, such as service station equipment, automated teller machines, telecommunications equipment, and medical equipment.

³Includes miscellaneous uses, such as pumps, emergency generators, combined heat and power in commercial buildings, and manufacturing performed in commercial buildings.

⁴Includes miscellaneous uses, such as cooking, emergency generators, and combined heat and power in commercial buildings.

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

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

⁷Represents primary energy displaced by solar thermal space heating and water heating, and electricity generation by solar photovoltaic systems.

Btu = British thermal unit.

PC = Personal computer.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 based on: Energy Information Administration (EIA), *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A6. Industrial Sector Key Indicators and Consumption

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Key Indicators								
Value of Shipments (billion 2000 dollars)								
Manufacturing	4208	4290	4577	5076	5493	5883	6283	1.6%
Nonmanufacturing	1525	1531	1419	1583	1619	1663	1715	0.5%
Total	5732	5821	5997	6659	7113	7546	7997	1.3%
Energy Prices (2006 dollars per million Btu)								
Liquefied Petroleum Gases	17.54	19.71	17.74	16.65	16.79	17.10	17.79	-0.4%
Motor Gasoline	15.48	15.48	21.18	18.72	19.63	19.62	20.32	1.1%
Distillate Fuel Oil	14.50	15.33	15.72	13.95	14.62	15.10	16.26	0.2%
Residual Fuel Oil	10.43	9.06	10.86	8.24	8.29	9.00	9.62	0.2%
Petrochemical Feedstocks	9.01	9.01	9.22	8.32	8.25	8.53	8.94	-0.0%
Asphalt and Road Oil	5.49	4.63	9.66	7.28	5.74	5.93	6.35	1.3%
Natural Gas Heat and Power	7.43	6.69	6.38	5.26	5.35	5.71	6.45	-0.2%
Natural Gas Feedstocks	9.07	8.37	7.95	6.90	6.96	7.31	8.04	-0.2%
Metallurgical Coal	3.29	3.54	4.07	3.53	3.42	3.51	3.60	0.1%
Other Industrial Coal	2.22	2.34	2.42	2.31	2.28	2.30	2.33	-0.0%
Coal for Liquids	--	--	--	0.96	1.09	1.17	1.30	--
Electricity	17.25	17.97	19.21	17.22	17.27	17.30	17.63	-0.1%
Energy Consumption (quadrillion Btu)¹								
Industrial Consumption Excluding Refining								
Liquefied Petroleum Gases Heat and Power ..	0.17	0.16	0.17	0.17	0.16	0.16	0.16	-0.1%
Liquefied Petroleum Gases Feedstocks	1.89	1.91	1.92	1.77	1.64	1.59	1.55	-0.9%
Motor Gasoline	0.37	0.38	0.38	0.37	0.37	0.38	0.38	0.1%
Distillate Fuel Oil	1.26	1.28	1.29	1.25	1.23	1.22	1.23	-0.2%
Residual Fuel Oil	0.27	0.27	0.28	0.23	0.22	0.21	0.21	-1.0%
Petrochemical Feedstocks	1.41	1.41	1.36	1.45	1.39	1.33	1.29	-0.4%
Petroleum Coke	0.33	0.36	0.34	0.32	0.31	0.31	0.30	-0.8%
Asphalt and Road Oil	1.32	1.26	1.22	1.11	1.08	1.10	1.13	-0.5%
Miscellaneous Petroleum ²	0.52	0.56	0.39	0.36	0.33	0.30	0.29	-2.7%
Petroleum Subtotal	7.53	7.60	7.34	7.04	6.73	6.59	6.55	-0.6%
Natural Gas Heat and Power	5.14	5.01	5.12	5.24	5.22	5.25	5.22	0.2%
Natural Gas Feedstocks	0.59	0.57	0.54	0.50	0.46	0.43	0.39	-1.5%
Lease and Plant Fuel ³	1.14	1.17	1.21	1.22	1.25	1.27	1.27	0.3%
Natural Gas Subtotal	6.88	6.74	6.86	6.97	6.93	6.95	6.88	0.1%
Metallurgical Coal and Coke ⁴	0.66	0.66	0.63	0.57	0.57	0.56	0.52	-1.0%
Other Industrial Coal	1.22	1.20	1.25	1.16	1.14	1.13	1.12	-0.3%
Coal Subtotal	1.88	1.86	1.87	1.73	1.71	1.69	1.64	-0.5%
Renewables ⁵	1.64	1.69	1.66	1.75	1.83	1.93	2.02	0.7%
Purchased Electricity	3.34	3.27	3.35	3.44	3.42	3.39	3.35	0.1%
Delivered Energy	21.28	21.17	21.09	20.92	20.62	20.55	20.44	-0.1%
Electricity Related Losses	7.30	7.13	7.17	7.26	7.22	7.09	6.92	-0.1%
Total	28.58	28.29	28.27	28.18	27.84	27.64	27.35	-0.1%
Refining Consumption								
Liquefied Petroleum Gases Heat and Power ..	0.02	0.01	0.03	0.03	0.03	0.00	0.00	-3.4%
Distillate Fuel Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Residual Fuel Oil	0.01	0.01	0.00	0.03	0.01	0.01	0.01	0.1%
Petroleum Coke	0.56	0.57	0.57	0.63	0.65	0.68	0.70	0.9%
Still Gas	1.64	1.69	1.72	1.87	1.85	1.87	1.98	0.7%
Miscellaneous Petroleum ²	0.03	0.04	0.00	0.00	0.00	0.00	0.00	-10.1%
Petroleum Subtotal	2.26	2.32	2.33	2.56	2.55	2.56	2.70	0.6%
Natural Gas Heat and Power	1.05	1.10	1.51	1.46	1.47	1.49	1.47	1.2%
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Natural Gas Subtotal	1.05	1.10	1.51	1.46	1.47	1.49	1.47	1.2%
Other Industrial Coal	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-0.2%
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.13	0.34	0.39	0.55	--
Coal Subtotal	0.06	0.06	0.06	0.19	0.40	0.45	0.61	10.0%
Biofuels Heat and Coproducts	0.24	0.30	0.67	1.00	1.49	2.28	2.31	8.9%
Purchased Electricity	0.13	0.15	0.15	0.17	0.17	0.17	0.17	0.7%
Delivered Energy	3.75	3.94	4.72	5.38	6.07	6.95	7.27	2.6%
Electricity Related Losses	0.29	0.32	0.33	0.37	0.36	0.35	0.36	0.5%
Total	4.04	4.26	5.05	5.75	6.43	7.29	7.63	2.5%

Table A6. Industrial Sector Key Indicators and Consumption (Continued)

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Total Industrial Sector Consumption								
Liquefied Petroleum Gases Heat and Power	0.18	0.17	0.20	0.20	0.19	0.16	0.16	-0.3%
Liquefied Petroleum Gases Feedstocks	1.89	1.91	1.92	1.77	1.64	1.59	1.55	-0.9%
Motor Gasoline	0.37	0.38	0.38	0.37	0.37	0.38	0.38	0.1%
Distillate Fuel Oil	1.26	1.28	1.29	1.25	1.23	1.22	1.23	-0.2%
Residual Fuel Oil	0.28	0.28	0.28	0.25	0.23	0.23	0.23	-0.9%
Petrochemical Feedstocks	1.41	1.41	1.36	1.45	1.39	1.33	1.29	-0.4%
Petroleum Coke	0.89	0.93	0.91	0.95	0.97	0.98	1.00	0.3%
Asphalt and Road Oil	1.32	1.26	1.22	1.11	1.08	1.10	1.13	-0.5%
Still Gas	1.64	1.69	1.72	1.87	1.85	1.87	1.98	0.7%
Miscellaneous Petroleum ²	0.55	0.60	0.39	0.36	0.33	0.30	0.29	-3.0%
Petroleum Subtotal	9.79	9.92	9.67	9.60	9.27	9.15	9.25	-0.3%
Natural Gas Heat and Power	6.20	6.11	6.62	6.70	6.68	6.74	6.69	0.4%
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Natural Gas Feedstocks	0.59	0.57	0.54	0.50	0.46	0.43	0.39	-1.5%
Lease and Plant Fuel ³	1.14	1.17	1.21	1.22	1.25	1.27	1.27	0.3%
Natural Gas Subtotal	7.93	7.85	8.37	8.43	8.39	8.44	8.35	0.3%
Metallurgical Coal and Coke ⁴	0.66	0.66	0.63	0.57	0.57	0.56	0.52	-1.0%
Other Industrial Coal	1.28	1.26	1.31	1.22	1.20	1.19	1.18	-0.3%
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.13	0.34	0.39	0.55	--
Coal Subtotal	1.95	1.92	1.93	1.92	2.11	2.14	2.26	0.7%
Biofuels Heat and Coproducts	0.24	0.30	0.67	1.00	1.49	2.28	2.31	8.9%
Renewables ⁵	1.64	1.69	1.66	1.75	1.83	1.93	2.02	0.7%
Purchased Electricity	3.48	3.42	3.50	3.61	3.59	3.55	3.52	0.1%
Delivered Energy	25.03	25.10	25.82	26.31	26.70	27.50	27.70	0.4%
Electricity Related Losses	7.59	7.45	7.50	7.63	7.57	7.43	7.28	-0.1%
Total	32.62	32.55	33.32	33.93	34.27	34.93	34.98	0.3%
Energy Consumption per dollar of Shipment (thousand Btu per 2000 dollars)								
Liquefied Petroleum Gases Heat and Power	0.03	0.03	0.03	0.03	0.03	0.02	0.02	-1.6%
Liquefied Petroleum Gases Feedstocks	0.33	0.33	0.32	0.27	0.23	0.21	0.19	-2.2%
Motor Gasoline	0.07	0.06	0.06	0.06	0.05	0.05	0.05	-1.2%
Distillate Fuel Oil	0.22	0.22	0.22	0.19	0.17	0.16	0.15	-1.5%
Residual Fuel Oil	0.05	0.05	0.05	0.04	0.03	0.03	0.03	-2.3%
Petrochemical Feedstocks	0.25	0.24	0.23	0.22	0.19	0.18	0.16	-1.7%
Petroleum Coke	0.16	0.16	0.15	0.14	0.14	0.13	0.13	-1.0%
Asphalt and Road Oil	0.23	0.22	0.20	0.17	0.15	0.15	0.14	-1.8%
Still Gas	0.29	0.29	0.29	0.28	0.26	0.25	0.25	-0.7%
Miscellaneous Petroleum ²	0.10	0.10	0.06	0.05	0.05	0.04	0.04	-4.2%
Petroleum Subtotal	1.71	1.70	1.61	1.44	1.30	1.21	1.16	-1.6%
Natural Gas Heat and Power	1.08	1.05	1.10	1.01	0.94	0.89	0.84	-0.9%
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Natural Gas Feedstocks	0.10	0.10	0.09	0.08	0.06	0.06	0.05	-2.8%
Lease and Plant Fuel ³	0.20	0.20	0.20	0.18	0.18	0.17	0.16	-1.0%
Natural Gas Subtotal	1.38	1.35	1.40	1.27	1.18	1.12	1.04	-1.1%
Metallurgical Coal and Coke ⁴	0.12	0.11	0.10	0.09	0.08	0.07	0.07	-2.3%
Other Industrial Coal	0.22	0.22	0.22	0.18	0.17	0.16	0.15	-1.6%
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.02	0.05	0.05	0.07	--
Coal Subtotal	0.34	0.33	0.32	0.29	0.30	0.28	0.28	-0.7%
Biofuels Heat and Coproducts	0.04	0.05	0.11	0.15	0.21	0.30	0.29	7.4%
Renewables ⁵	0.29	0.29	0.28	0.26	0.26	0.26	0.25	-0.6%
Purchased Electricity	0.61	0.59	0.58	0.54	0.50	0.47	0.44	-1.2%
Delivered Energy	4.37	4.31	4.31	3.95	3.75	3.64	3.46	-0.9%
Electricity Related Losses	1.32	1.28	1.25	1.15	1.06	0.99	0.91	-1.4%
Total	5.69	5.59	5.56	5.10	4.82	4.63	4.37	-1.0%

Reference Case

Table A6. Industrial Sector Key Indicators and Consumption (Continued)

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Industrial Combined Heat and Power								
Capacity (gigawatts)	26.87	25.69	28.11	31.79	36.84	42.15	44.85	2.3%
Generation (billion kilowatthours)	139.95	139.50	155.59	182.91	220.78	261.90	281.41	3.0%

¹Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

²Includes lubricants and miscellaneous petroleum products.

³Represents natural gas used in well, field, and lease operations, and in natural gas processing plant machinery.

⁴Includes net coal coke imports.

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

Btu = British thermal unit.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 prices for motor gasoline and distillate fuel oil are based on: Energy Information Administration (EIA), *Petroleum Marketing Annual 2006*, DOE/EIA-0487(2006) (Washington, DC, August 2007). 2005 and 2006 petrochemical feedstock and asphalt and road oil prices are based on: *State Energy Data Report 2005*, DOE/EIA-0214(2005) (Washington, DC, June 2007). 2005 and 2006 coal prices are based on: EIA, *Quarterly Coal Report, October-December 2006*, DOE/EIA-0121(2006/4Q) (Washington, DC, March 2007) and EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F. 2005 and 2006 electricity prices: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 and 2006 natural gas prices are based on: EIA, *Manufacturing Energy Consumption Survey 1994* and industrial and wellhead prices from the *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006) and the *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). 2005 refining consumption based on: *Petroleum Supply Annual 2005*, DOE/EIA-0340(2005)/1 (Washington, DC, October 2006). 2006 refining consumption based on: *Petroleum Supply Annual 2006*, DOE/EIA-0340(2006)/1 (Washington, DC, September 2007). Other 2005 and 2006 consumption values are based on: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 and 2006 industrial shipments: Global Insight, Global Insight Industry model, July 2007. **Projections:** EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A7. Transportation Sector Key Indicators and Delivered Energy Consumption

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Key Indicators								
Travel Indicators								
(billion vehicle miles traveled)								
Light-Duty Vehicles less than 8,500 pounds	2687	2693	2777	3058	3375	3717	4069	1.7%
Commercial Light Trucks ¹	69	70	73	81	87	94	101	1.5%
Freight Trucks greater than 10,000 pounds	228	235	250	279	304	328	351	1.7%
(billion seat miles available)								
Air	1029	994	1130	1318	1457	1576	1665	2.2%
(billion ton miles traveled)								
Rail	1588	1656	1702	1827	1932	2043	2147	1.1%
Domestic Shipping	610	619	643	677	701	713	721	0.6%
Energy Efficiency Indicators								
(miles per gallon)								
Tested New Light-Duty Vehicle ²	25.5	26.5	27.2	30.8	35.8	36.4	36.6	1.4%
New Car ²	30.2	31.1	31.5	34.9	42.0	42.1	42.1	1.3%
New Light Truck ²	22.4	23.2	23.7	27.7	31.4	32.2	32.4	1.4%
On-Road New Light-Duty Vehicle ³	20.6	21.5	22.1	25.2	29.4	30.1	30.5	1.5%
New Car ³	24.5	25.3	25.7	28.7	34.7	35.1	35.3	1.4%
New Light Truck ³	18.0	18.7	19.2	22.5	25.7	26.5	26.9	1.5%
Light-Duty Stock ⁴	19.9	20.3	20.3	21.5	23.7	26.1	27.9	1.3%
New Commercial Light Truck ¹	15.0	15.6	15.7	18.1	19.8	20.2	20.2	1.1%
Stock Commercial Light Truck ¹	14.1	14.3	14.9	15.9	17.4	18.9	19.8	1.4%
Freight Truck	6.0	6.0	6.0	6.2	6.5	6.7	6.8	0.5%
(seat miles per gallon)								
Aircraft	60.9	62.2	63.5	65.3	67.2	68.7	70.0	0.5%
(ton miles per thousand Btu)								
Rail	2.9	2.9	2.9	2.9	3.0	3.0	3.0	0.1%
Domestic Shipping	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.1%
Energy Use by Mode								
(quadrillion Btu)								
Light-Duty Vehicles	16.23	16.41	16.52	17.01	17.10	17.11	17.52	0.3%
Commercial Light Trucks ¹	0.61	0.62	0.62	0.64	0.63	0.63	0.64	0.2%
Bus Transportation	0.26	0.26	0.26	0.27	0.27	0.28	0.29	0.3%
Freight Trucks	4.74	4.89	5.18	5.60	5.85	6.13	6.44	1.2%
Rail, Passenger	0.04	0.04	0.05	0.05	0.05	0.05	0.06	1.1%
Rail, Freight	0.55	0.57	0.58	0.62	0.65	0.69	0.72	1.0%
Shipping, Domestic	0.31	0.32	0.33	0.34	0.35	0.36	0.36	0.5%
Shipping, International	0.77	0.78	0.79	0.78	0.79	0.80	0.80	0.1%
Recreational Boats	0.24	0.24	0.25	0.26	0.28	0.29	0.30	0.9%
Air	2.72	2.65	2.90	3.29	3.61	3.92	4.22	2.0%
Military Use	0.68	0.69	0.73	0.71	0.73	0.75	0.76	0.4%
Lubricants	0.15	0.15	0.14	0.14	0.14	0.15	0.15	0.1%
Pipeline Fuel	0.60	0.59	0.64	0.66	0.69	0.72	0.72	0.8%
Total	27.90	28.20	28.98	30.37	31.15	31.86	32.98	0.7%

Reference Case

**Table A7. Transportation Sector Key Indicators and Delivered Energy Consumption
(Continued)**

Key Indicators and Consumption	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Energy Use by Mode								
(million barrels per day oil equivalent)								
Light-Duty Vehicles	8.51	8.60	8.94	9.26	9.48	9.56	9.74	0.5%
Commercial Light Trucks ¹	0.32	0.32	0.33	0.35	0.34	0.34	0.35	0.3%
Bus Transportation	0.12	0.13	0.13	0.13	0.13	0.13	0.14	0.4%
Freight Trucks	2.26	2.33	2.48	2.69	2.80	2.94	3.09	1.2%
Rail, Passenger	0.02	0.02	0.02	0.02	0.02	0.03	0.03	1.1%
Rail, Freight	0.26	0.27	0.28	0.30	0.31	0.33	0.34	1.0%
Shipping, Domestic	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.5%
Shipping, International	0.34	0.34	0.35	0.34	0.35	0.35	0.35	0.1%
Recreational Boats	0.13	0.13	0.14	0.14	0.15	0.16	0.16	1.1%
Air	1.32	1.28	1.40	1.59	1.75	1.89	2.04	2.0%
Military Use	0.33	0.33	0.35	0.34	0.35	0.36	0.37	0.4%
Lubricants	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.1%
Pipeline Fuel	0.30	0.30	0.32	0.33	0.35	0.36	0.36	0.8%
Total	14.11	14.27	14.96	15.72	16.27	16.69	17.20	0.8%

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

²Environmental Protection Agency rated miles per gallon.

³Tested new vehicle efficiency revised for on-road performance.

⁴Combined car and light truck "on-the-road" estimate.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006: Energy Information Administration (EIA), *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006); EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007); Federal Highway Administration, *Highway Statistics 2005* (Washington, DC, December 2006); Oak Ridge National Laboratory, *Transportation Energy Data Book: Edition 26 and Annual* (Oak Ridge, TN, 2007); National Highway Traffic and Safety Administration, *Summary of Fuel Economy Performance* (Washington, DC, March 2004); U.S. Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); EIA, *State Energy Data Report 2005*, DOE/EIA-0214(2005) (Washington, DC, June 2007); EIA, *Alternatives to Traditional Transportation Fuels 2005 (Part II-User and Fuel Data)*, November 2007; U.S. Department of Transportation, Research and Special Programs Administration, *Air Carrier Statistics Monthly, December 2006/2005* (Washington, DC, 2006); EIA, *Fuel Oil and Kerosene Sales 2004*, DOE/EIA-0535(2004) (Washington, DC, November 2005); and United States Department of Defense, Defense Fuel Supply Center. **Projections:** EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A8. Electricity Supply, Disposition, Prices, and Emissions
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Generation by Fuel Type								
Electric Power Sector¹								
Power Only²								
Coal	1956	1930	2002	2122	2287	2502	2756	1.5%
Petroleum	111	55	49	50	52	54	56	0.1%
Natural Gas ³	554	608	695	682	614	543	503	-0.8%
Nuclear Power	782	787	797	807	868	911	917	0.6%
Pumped Storage/Other ⁴	1	0	1	1	1	1	1	5.4%
Renewable Sources ⁵	319	347	421	465	518	540	553	2.0%
Distributed Generation (Natural Gas)	0	0	0	1	1	2	4	--
Total	3722	3727	3965	4128	4340	4552	4790	1.1%
Combined Heat and Power⁶								
Coal	37	36	32	32	32	32	31	-0.6%
Petroleum	6	4	1	1	1	1	1	-6.7%
Natural Gas	130	124	124	123	108	99	96	-1.1%
Renewable Sources	4	4	4	4	5	5	5	0.5%
Total	180	173	160	160	145	136	133	-1.1%
Total Net Generation	3902	3900	4125	4288	4485	4688	4923	1.0%
Less Direct Use	33	33	34	34	34	34	34	0.1%
Net Available to the Grid	3869	3866	4091	4254	4451	4654	4889	1.0%
End-Use Generation⁷								
Coal	22	22	21	28	39	41	51	3.6%
Petroleum	6	4	6	6	7	9	9	3.6%
Natural Gas	73	74	88	99	111	124	138	2.6%
Other Gaseous Fuels ⁸	5	5	4	4	4	4	4	-0.7%
Renewable Sources ⁹	34	34	37	48	65	94	98	4.5%
Other ¹⁰	14	13	12	12	12	12	12	-0.4%
Total	152	152	169	197	238	285	313	3.1%
Less Direct Use	123	121	134	155	182	211	234	2.8%
Total Sales to the Grid	30	31	34	42	56	74	79	4.0%
Total Electricity Generation	4054	4051	4294	4485	4723	4973	5235	1.1%
Total Net Generation to the Grid	3899	3897	4126	4296	4507	4728	4968	1.0%
Net Imports	25	18	15	11	13	16	23	1.0%
Electricity Sales by Sector								
Residential	1359	1351	1450	1472	1540	1620	1722	1.0%
Commercial	1275	1300	1386	1522	1661	1802	1941	1.7%
Industrial	1019	1002	1027	1058	1052	1041	1033	0.1%
Transportation	6	6	7	7	8	8	9	1.3%
Total	3660	3659	3869	4059	4261	4472	4705	1.1%
Direct Use	156	154	168	189	216	245	267	2.3%
Total Electricity Use	3815	3814	4037	4248	4477	4717	4972	1.1%
End-Use Prices								
(2006 cents per kilowatthour)								
Residential	9.7	10.4	10.7	10.2	10.3	10.3	10.5	0.0%
Commercial	8.9	9.5	9.5	8.7	8.7	8.8	8.9	-0.2%
Industrial	5.9	6.1	6.6	5.9	5.9	5.9	6.0	-0.1%
Transportation	10.5	10.1	10.6	9.9	9.9	9.9	10.1	-0.0%
All Sectors Average	8.4	8.9	9.2	8.5	8.6	8.7	8.8	-0.0%
Prices by Service Category								
(2006 cents per kilowatthour)								
Generation	5.4	5.9	6.2	5.5	5.6	5.7	5.9	-0.1%
Transmission	0.6	0.6	0.7	0.8	0.8	0.8	0.8	1.1%
Distribution	2.3	2.3	2.3	2.3	2.3	2.2	2.2	-0.2%

Reference Case

Table A8. Electricity Supply, Disposition, Prices, and Emissions (Continued)
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Electric Power Sector Emissions¹								
Sulfur Dioxide (million tons)	10.22	9.39	6.43	4.67	3.77	3.66	3.71	-3.8%
Nitrogen Oxide (million tons)	3.64	3.41	2.33	2.11	2.11	2.14	2.16	-1.9%
Mercury (tons)	51.72	50.37	37.24	24.75	19.23	16.88	14.95	-4.9%

¹Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.

²Includes plants that only produce electricity.

³Includes electricity generation from fuel cells.

⁴Includes non-biogenic municipal waste. The Energy Information Administration estimates approximately 7 billion kilowatthours of electricity was generated from this material in 2005. See Energy Information Administration, *Methodology for Allocating Municipal Solid Waste to Biogenic and Non-Biogenic Energy*, (Washington, DC, May 2007).

⁵Includes conventional hydroelectric, geothermal, wood, wood waste, biogenic municipal waste, landfill gas, other biomass, solar, and wind power.

⁶Includes combined heat and power plants whose primary business is to sell electricity and heat to the public (i.e., those that report North American Industry Classification System code 22).

⁷Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

⁸Includes refinery gas and still gas.

⁹Includes conventional hydroelectric, geothermal, wood, wood waste, all municipal waste, landfill gas, other biomass, solar, and wind power.

¹⁰Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 electric power sector generation; sales to utilities; net imports; electricity sales; and emissions: Energy Information Administration (EIA), *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007), and supporting databases. 2005 and 2006 prices: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F. Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

**Table A9. Electricity Generating Capacity
(Gigawatts)**

Net Summer Capacity ¹	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Electric Power Sector²								
Power Only³								
Coal	305.1	305.2	311.4	319.3	338.5	367.6	401.5	1.1%
Oil and Natural Gas Steam ⁴	120.8	119.3	118.0	93.2	93.0	92.6	92.6	-1.1%
Combined Cycle	137.4	144.7	158.2	159.9	164.2	173.3	177.5	0.9%
Combustion Turbine/Diesel	127.4	128.1	134.5	127.1	129.2	140.9	161.8	1.0%
Nuclear Power ⁵	100.2	100.2	100.9	102.1	110.9	115.7	114.9	0.6%
Pumped Storage	21.5	21.5	21.5	21.5	21.5	21.5	21.5	0.0%
Fuel Cells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Renewable Sources ⁶	92.8	95.7	110.9	116.6	122.9	127.5	131.8	1.3%
Distributed Generation ⁷	0.0	0.0	0.3	0.9	2.7	5.9	9.8	--
Total	905.2	914.7	955.7	940.6	982.8	1045.0	1111.4	0.8%
Combined Heat and Power⁸								
Coal	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0%
Oil and Natural Gas Steam ⁴	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0%
Combined Cycle	31.9	31.8	31.8	32.5	32.5	32.5	32.5	0.1%
Combustion Turbine/Diesel	2.9	2.9	2.9	2.9	2.9	2.9	2.9	-0.0%
Renewable Sources ⁶	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.2%
Total	40.4	40.3	40.3	41.0	41.0	41.0	41.0	0.1%
Cumulative Planned Additions⁹								
Coal	0.0	0.0	7.7	10.7	10.7	10.7	10.7	--
Oil and Natural Gas Steam ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Combined Cycle	0.0	0.0	13.5	15.5	15.5	15.5	15.5	--
Combustion Turbine/Diesel	0.0	0.0	3.9	3.9	3.9	3.9	3.9	--
Nuclear Power	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Pumped Storage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Fuel Cells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Renewable Sources ⁶	0.0	0.0	9.5	9.5	9.6	9.8	9.9	--
Distributed Generation ⁷	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Total	0.0	0.0	34.5	39.6	39.7	39.9	40.0	--
Cumulative Unplanned Additions⁹								
Coal	0.0	0.0	0.0	6.8	26.3	55.6	89.5	--
Oil and Natural Gas Steam ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Combined Cycle	0.0	0.0	0.0	0.3	4.6	13.7	17.9	--
Combustion Turbine/Diesel	0.0	0.0	3.3	4.6	6.7	18.4	39.5	--
Nuclear Power	0.0	0.0	0.0	0.0	8.0	12.8	16.6	--
Pumped Storage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Fuel Cells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Renewable Sources ⁶	0.0	0.0	5.8	11.5	17.6	22.2	26.3	--
Distributed Generation ⁷	0.0	0.0	0.3	0.9	2.7	5.9	9.8	--
Total	0.0	0.0	9.5	24.1	65.9	128.5	199.6	--
Cumulative Electric Power Sector Additions	0.0	0.0	44.0	63.7	105.7	168.4	239.6	--
Cumulative Retirements¹⁰								
Coal	0.0	0.0	1.5	3.4	3.7	3.9	3.9	--
Oil and Natural Gas Steam ⁴	0.0	0.0	1.4	26.1	26.4	26.7	26.8	--
Combined Cycle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Combustion Turbine/Diesel	0.0	0.0	0.7	9.4	9.4	9.4	9.7	--
Nuclear Power	0.0	0.0	0.0	0.0	0.0	0.0	4.5	--
Pumped Storage	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Fuel Cells	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Renewable Sources ⁶	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Total	0.0	0.0	3.6	38.9	39.5	40.0	44.8	--
Total Electric Power Sector Capacity	945.6	955.0	996.0	981.6	1023.8	1086.0	1152.4	0.8%

Reference Case

Table A9. Electricity Generating Capacity (Continued)
(Gigawatts)

Net Summer Capacity ¹	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
End-Use Generators¹¹								
Coal	4.1	4.0	4.0	4.9	6.3	6.6	8.0	2.9%
Petroleum	1.2	1.2	1.7	1.7	1.9	2.1	2.1	2.4%
Natural Gas	14.7	14.1	15.8	17.2	18.8	20.6	22.4	2.0%
Other Gaseous Fuels	2.2	1.8	1.7	1.7	1.7	1.7	1.7	-0.1%
Renewable Sources ⁶	6.0	6.0	6.7	8.2	10.8	15.2	16.7	4.4%
Other	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.0%
Total	29.0	27.9	30.7	34.6	40.4	47.0	51.8	2.6%
Cumulative Capacity Additions⁹	0.0	0.0	2.9	6.8	12.5	19.1	23.9	--

¹Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand.

²Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.

³Includes plants that only produce electricity. Includes capacity increases (uprates) at existing units.

⁴Includes oil-, gas-, and dual-fired capacity.

⁵Nuclear capacity includes 2.7 gigawatts of uprates through 2030.

⁶Includes conventional hydroelectric, geothermal, wood, wood waste, all municipal waste, landfill gas, other biomass, solar, and wind power. Facilities co-firing biomass and coal are classified as coal.

⁷Primarily peak load capacity fueled by natural gas.

⁸Includes combined heat and power plants whose primary business is to sell electricity and heat to the public (i.e., those that report North American Industry Classification System code 22).

⁹Cumulative additions after December 31, 2006.

¹⁰Cumulative retirements after December 31, 2006.

¹¹Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A10. Electricity Trade
(Billion Kilowatthours, Unless Otherwise Noted)

Electricity Trade	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Interregional Electricity Trade								
Gross Domestic Sales								
Firm Power	127.0	119.4	105.5	82.4	50.6	37.9	37.9	-4.7%
Economy	177.3	169.7	207.2	260.7	220.3	229.5	222.6	1.1%
Total	304.3	289.1	312.7	343.1	270.9	267.4	260.4	-0.4%
Gross Domestic Sales (million 2006 dollars)								
Firm Power	7077.5	6656.0	5877.2	4592.5	2820.0	2111.0	2111.0	-4.7%
Economy	12274.8	9907.5	12125.3	12861.2	10709.6	10964.4	11182.2	0.5%
Total	19352.3	16563.4	18002.5	17453.6	13529.6	13075.4	13293.2	-0.9%
International Electricity Trade								
Imports from Canada and Mexico								
Firm Power	13.1	13.7	2.5	1.9	0.8	0.4	0.4	-13.8%
Economy	31.4	28.8	28.9	24.7	26.6	27.5	34.3	0.7%
Total	44.5	42.4	31.4	26.6	27.4	27.9	34.7	-0.8%
Exports to Canada and Mexico								
Firm Power	2.9	3.2	1.0	0.7	0.2	0.0	0.0	--
Economy	16.9	21.4	15.5	15.0	14.0	12.1	12.1	-2.3%
Total	19.8	24.6	16.5	15.6	14.2	12.1	12.1	-2.9%

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports. Firm Power Sales are capacity sales, meaning the delivery of the power is scheduled as part of the normal operating conditions of the affected electric systems. Economy Sales are subject to curtailment or cessation of delivery by the supplier in accordance with prior agreements or under specified conditions.

Sources: 2005 and 2006 interregional firm electricity trade data: North American Electric Reliability Council (NERC), Electricity Sales and Demand Database 2004. 2005 and 2006 Mexican electricity trade data: Energy Information Administration (EIA), *Electric Power Annual 2006* DOE/EIA-0348(2006) (Washington, DC, November 2007). 2005 Canadian international electricity trade data: National Energy Board, *Annual Report 2005*. 2006 Canadian electricity trade data: National Energy Board, *Annual Report 2006*. Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A11. Liquid Fuels Supply and Disposition
(Million Barrels per Day, Unless Otherwise Noted)

Supply and Disposition	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Crude Oil								
Domestic Crude Production ¹	5.19	5.10	5.93	6.16	6.23	6.04	5.59	0.4%
Alaska	0.86	0.74	0.69	0.57	0.70	0.53	0.30	-3.7%
Lower 48 States	4.33	4.36	5.24	5.59	5.53	5.51	5.30	0.8%
Net Imports	10.09	10.09	9.60	9.89	9.75	10.11	11.03	0.4%
Gross Imports	10.12	10.12	9.63	9.92	9.79	10.14	11.06	0.4%
Exports	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.4%
Other Crude Supply ²	-0.05	0.05	0.00	0.00	0.00	0.00	0.00	--
Total Crude Supply	15.23	15.24	15.53	16.04	15.98	16.15	16.63	0.4%
Other Supply								
Natural Gas Plant Liquids	1.72	1.74	1.68	1.70	1.72	1.61	1.57	-0.4%
Net Product Imports	2.47	2.31	1.72	1.47	1.37	1.27	1.26	-2.5%
Gross Refined Product Imports ³	2.45	2.17	1.61	1.34	1.41	1.50	1.56	-1.4%
Unfinished Oil Imports	0.58	0.69	0.67	0.67	0.64	0.62	0.70	0.1%
Blending Component Imports	0.54	0.68	0.74	0.79	0.67	0.59	0.52	-1.1%
Exports	1.07	1.22	1.30	1.33	1.36	1.45	1.52	0.9%
Refinery Processing Gain ⁴	0.99	0.99	1.05	1.06	1.00	0.97	0.99	0.0%
Other Inputs	0.41	0.45	1.04	1.46	1.97	2.34	2.41	7.2%
Ethanol	0.26	0.36	0.81	1.04	1.41	1.59	1.56	6.2%
Domestic Production	0.25	0.32	0.74	0.93	1.17	1.45	1.44	6.5%
Net Imports	0.01	0.05	0.07	0.11	0.24	0.15	0.12	4.0%
Biodiesel	0.01	0.02	0.04	0.08	0.07	0.07	0.08	6.9%
Domestic Production	0.01	0.02	0.04	0.08	0.07	0.07	0.08	6.9%
Net Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Liquids from Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Liquids from Coal	0.00	0.00	0.00	0.06	0.15	0.17	0.24	--
Liquids from Biomass	0.00	0.00	0.00	0.07	0.14	0.28	0.29	--
Other ⁵	0.14	0.07	0.18	0.21	0.21	0.22	0.24	5.0%
Total Primary Supply⁶	20.82	20.74	21.02	21.74	22.04	22.34	22.86	0.4%
Liquid Fuels Consumption								
by Fuel								
Liquefied Petroleum Gases	2.03	2.05	2.05	1.96	1.86	1.81	1.80	-0.5%
E85 ⁷	0.00	0.00	0.00	0.12	0.67	0.97	0.92	33.5%
Motor Gasoline ⁸	9.16	9.25	9.59	9.73	9.24	8.84	8.91	-0.2%
Jet Fuel ⁹	1.68	1.63	1.66	1.85	2.01	2.16	2.31	1.5%
Distillate Fuel Oil ¹⁰	4.12	4.17	4.40	4.68	4.91	5.19	5.53	1.2%
Diesel	3.04	3.21	3.72	4.00	4.23	4.52	4.87	1.8%
Residual Fuel Oil	0.92	0.69	0.70	0.69	0.69	0.69	0.70	0.0%
Other ¹¹	2.89	2.86	2.58	2.65	2.58	2.57	2.62	-0.4%
by Sector								
Residential and Commercial	1.19	1.07	1.08	1.11	1.13	1.12	1.12	0.2%
Industrial ¹²	5.09	5.15	5.06	4.98	4.79	4.70	4.73	-0.4%
Transportation	13.91	14.05	14.60	15.33	15.79	16.15	16.66	0.7%
Electric Power ¹³	0.55	0.29	0.25	0.25	0.26	0.27	0.28	-0.1%
Total	20.80	20.65	20.99	21.68	21.96	22.25	22.80	0.4%
Discrepancy¹⁴	0.02	0.09	0.03	0.06	0.08	0.09	0.06	--

Table A11. Liquid Fuels Supply and Disposition (Continued)
(Million Barrels per Day, Unless Otherwise Noted)

Supply and Disposition	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Domestic Refinery Distillation Capacity ¹⁵	17.1	17.3	18.3	18.3	18.3	18.3	18.4	0.3%
Capacity Utilization Rate (percent) ¹⁶	91.0	90.0	86.8	89.6	89.3	90.1	92.0	0.1%
Net Import Share of Product Supplied (percent)	60.4	60.0	54.2	52.8	51.6	51.6	54.3	-0.4%
Net Expenditures for Imported Crude Oil and Petroleum Products (billion 2006 dollars)	251.73	264.86	254.07	203.53	207.19	228.18	261.91	-0.0%

¹Includes lease condensate.

²Strategic petroleum reserve stock additions plus unaccounted for crude oil and crude stock withdrawals minus crude product supplied.

³Includes other hydrocarbons and alcohols.

⁴The volumetric amount by which total output is greater than input due to the processing of crude oil into products which, in total, have a lower specific gravity than the crude oil processed.

⁵Includes petroleum product stock withdrawals, domestic sources of blending components, other hydrocarbons, and ethers.

⁶Total crude supply plus natural gas plant liquids, other inputs, refinery processing gain, and net product imports.

⁷E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

⁸Includes ethanol and ethers blended into gasoline.

⁹Includes only kerosene type.

¹⁰Includes distillate fuel oil and kerosene from petroleum and biomass feedstocks.

¹¹Includes aviation gasoline, petrochemical feedstocks, lubricants, waxes, asphalt, road oil, still gas, special naphthas, petroleum coke, crude oil product supplied, methanol, liquid hydrogen, and miscellaneous petroleum products.

¹²Includes consumption for combined heat and power, which produces electricity and other useful thermal energy.

¹³Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

¹⁴Balancing item. Includes unaccounted for supply, losses, and gains.

¹⁵End-of-year operable capacity.

¹⁶Rate is calculated by dividing the gross annual input to atmospheric crude oil distillation units by their operable refining capacity in barrels per calendar day.

- - Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 imported crude oil price and petroleum product supplied based on: Energy Information Administration (EIA), *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 and 2006 imported low sulfur light crude oil price: EIA, Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report." Other 2005 data: EIA, *Petroleum Supply Annual 2005*, DOE/EIA-0340(2005)/1 (Washington, DC, October 2006). Other 2006 data: EIA, *Petroleum Supply Annual 2006*, DOE/EIA-0340(2006)/1 (Washington, DC, September 2007). Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A12. Petroleum Product Prices
(2006 Cents per Gallon, Unless Otherwise Noted)

Sector and Fuel	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Crude Oil Prices (2006 dollars per barrel)								
Imported Low Sulfur Light Crude Oil ¹	58.28	66.02	74.03	59.85	59.70	64.49	70.45	0.3%
Imported Crude Oil ¹	50.40	59.05	65.18	52.03	51.55	55.68	58.66	-0.0%
Delivered Sector Product Prices								
Residential								
Liquefied Petroleum Gases	162.3	198.1	216.3	207.3	207.9	211.4	218.3	0.4%
Distillate Fuel Oil	235.6	248.8	238.6	197.9	198.0	209.9	225.7	-0.4%
Commercial								
Distillate Fuel Oil	191.2	201.8	210.2	177.5	182.5	191.3	206.7	0.1%
Residual Fuel Oil	167.8	128.8	150.7	119.0	118.9	129.1	138.0	0.3%
Residual Fuel Oil (2006 dollars per barrel)	70.46	54.09	63.27	49.97	49.95	54.21	57.97	0.3%
Industrial²								
Liquefied Petroleum Gases	151.1	169.2	152.3	142.9	144.1	146.8	152.7	-0.4%
Distillate Fuel Oil	200.8	212.1	216.2	191.6	200.7	207.3	223.1	0.2%
Residual Fuel Oil	156.2	135.6	162.6	123.4	124.0	134.7	144.0	0.2%
Residual Fuel Oil (2006 dollars per barrel)	65.60	56.96	68.29	51.82	52.10	56.57	60.48	0.2%
Transportation								
Liquefied Petroleum Gases	176.6	186.4	223.4	214.0	214.0	216.9	223.4	0.8%
Ethanol (E85) ³	226.6	235.4	223.7	167.0	172.2	175.5	186.1	-1.0%
Ethanol Wholesale Price	196.8	250.0	180.8	171.3	200.7	164.6	152.2	-2.0%
Motor Gasoline ⁴	239.5	263.3	255.4	225.4	235.5	236.0	244.6	-0.3%
Jet Fuel ⁵	179.6	200.2	212.8	177.6	179.2	191.0	207.5	0.1%
Diesel Fuel (distillate fuel oil) ⁶	249.1	271.0	269.8	241.8	250.2	254.1	268.5	-0.0%
Residual Fuel Oil	129.9	118.1	157.7	128.2	130.1	142.1	155.5	1.2%
Residual Fuel Oil (2006 dollars per barrel)	54.56	49.62	66.22	53.84	54.64	59.70	65.32	1.2%
Electric Power⁷								
Distillate Fuel Oil	175.1	185.1	189.0	148.0	148.3	160.8	176.2	-0.2%
Residual Fuel Oil	110.8	122.3	141.5	110.9	112.3	123.4	135.3	0.4%
Residual Fuel Oil (2006 dollars per barrel)	46.52	51.37	59.43	46.56	47.18	51.85	56.84	0.4%
Refined Petroleum Product Prices⁸								
Liquefied Petroleum Gases	153.0	174.6	165.4	157.2	159.5	163.3	170.1	-0.1%
Motor Gasoline ⁴	238.4	261.6	255.4	225.4	235.5	236.0	244.6	-0.3%
Jet Fuel ⁵	179.6	200.2	212.8	177.6	179.2	191.0	207.5	0.1%
Distillate Fuel Oil	236.3	255.9	253.9	227.4	236.1	241.9	257.1	0.0%
Residual Fuel Oil	126.4	122.9	154.3	122.6	124.1	135.6	147.7	0.8%
Residual Fuel Oil (2006 dollars per barrel)	53.07	51.63	64.80	51.50	52.12	56.94	62.04	0.8%
Average	213.0	234.5	233.1	206.6	214.1	218.0	229.6	-0.1%

¹Weighted average price delivered to U.S. refiners.

²Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

³E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

⁴Sales weighted-average price for all grades. Includes Federal, State and local taxes.

⁵Includes only kerosene type.

⁶Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.

⁷Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

⁸Weighted averages of end-use fuel prices are derived from the prices in each sector and the corresponding sectoral consumption.

Note: Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 imported low sulfur light crude oil price: Energy Information Administration (EIA), Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report." 2005 and 2006 imported crude oil price: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 and 2006 prices for motor gasoline, distillate fuel oil, and jet fuel are based on: EIA, *Petroleum Marketing Annual 2006*, DOE/EIA-0487(2006) (Washington, DC, August 2007). 2005 and 2006 residential, commercial, industrial, and transportation sector petroleum product prices are derived from: EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report." 2005 and 2006 electric power prices based on: Federal Energy Regulatory Commission, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." 2005 and 2006 ethanol prices derived from weekly spot prices in the Oxy Fuel News. 2005 and 2006 wholesale ethanol prices derived from Bloomberg U.S. average rack price. Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A13. Natural Gas Supply, Disposition, and Prices
(Trillion Cubic Feet per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Production								
Dry Gas Production ¹	18.07	18.51	19.29	19.52	19.67	19.60	19.43	0.2%
Supplemental Natural Gas ²	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.1%
Net Imports								
Pipeline ³	3.61	3.46	3.85	4.03	3.55	3.28	3.18	-0.4%
Liquefied Natural Gas	3.05	2.94	2.64	1.91	1.18	0.68	0.33	-8.7%
	0.57	0.52	1.20	2.12	2.37	2.60	2.84	7.3%
Total Supply								
	21.75	22.03	23.20	23.61	23.28	22.94	22.68	0.1%
Consumption by Sector								
Residential	4.83	4.37	4.81	5.01	5.15	5.19	5.17	0.7%
Commercial	3.00	2.83	2.96	3.20	3.37	3.53	3.67	1.1%
Industrial ⁴	6.60	6.49	6.95	7.00	6.93	6.96	6.87	0.2%
Natural-Gas-to-Liquids Heat and Power ⁵	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Natural Gas to Liquids Production ⁶	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Electric Power ⁷	5.87	6.24	6.70	6.56	5.92	5.30	4.99	-0.9%
Transportation ⁸	0.01	0.02	0.03	0.06	0.07	0.08	0.09	6.2%
Pipeline Fuel	0.58	0.58	0.62	0.64	0.67	0.70	0.70	0.8%
Lease and Plant Fuel ⁹	1.11	1.14	1.18	1.19	1.22	1.24	1.23	0.3%
Total	22.01	21.66	23.25	23.66	23.33	22.99	22.72	0.2%
Discrepancy¹⁰								
	-0.26	0.37	-0.05	-0.05	-0.05	-0.04	-0.05	--
Natural Gas Prices								
(2006 dollars per million Btu)								
Henry Hub Spot Price	8.93	6.73	6.90	5.87	5.95	6.39	7.22	0.3%
Average Lower 48 Wellhead Price ¹¹	7.62	6.24	6.16	5.21	5.29	5.69	6.45	0.1%
(2006 dollars per thousand cubic feet)								
Average Lower 48 Wellhead Price ¹¹	7.85	6.42	6.33	5.36	5.44	5.86	6.63	0.1%
Delivered Prices								
Residential	13.23	13.80	12.52	11.54	11.74	12.29	13.30	-0.2%
Commercial	11.86	11.85	10.91	9.97	10.20	10.78	11.78	-0.0%
Industrial ⁴	8.62	7.89	7.43	6.33	6.40	6.76	7.50	-0.2%
Electric Power ⁷	8.67	7.07	7.16	6.10	6.11	6.44	7.13	0.0%
Transportation ¹²	14.97	14.71	14.01	12.71	12.52	12.65	13.22	-0.4%
Average¹³	10.22	9.49	8.97	8.00	8.22	8.73	9.63	0.1%

¹Marketed production (wet) minus extraction losses.

²Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

³Includes any natural gas regasified in the Bahamas and transported via pipeline to Florida, as well as gas from Canada and Mexico.

⁴Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

⁵Includes any natural gas used in the process of converting natural gas to liquid fuel that is not actually converted.

⁶Includes any natural gas that is converted into liquid fuel.

⁷Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

⁸Compressed natural gas used as vehicle fuel.

⁹Represents natural gas used in well, field, and lease operations, and in natural gas processing plant machinery.

¹⁰Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. 2005 and 2006 values include net storage injections.

¹¹Represents lower 48 onshore and offshore supplies.

¹²Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes and estimated dispensing costs or charges.

¹³Weighted average prices. Weights used are the sectoral consumption values excluding lease, plant, and pipeline fuel.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 supply values; lease, plant, and pipeline fuel consumption; and residential and commercial delivered prices: Energy Information Administration (EIA), *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2006 supply values; lease, plant, and pipeline fuel consumption; wellhead price; and residential and commercial delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). Other 2005 and 2006 consumption based on: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 wellhead price: Minerals Management Service and EIA, *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2005 and 2006 electric power prices: EIA, *Electric Power Monthly*, DOE/EIA-0226, May 2006 through April 2007, Table 4.11.A. 2005 and 2006 industrial delivered prices are estimated based on: EIA, *Manufacturing Energy Consumption Survey 1994* and industrial and wellhead prices from the *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006) and the *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). 2005 transportation sector delivered prices are based on: EIA, *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006) and estimated state taxes, federal taxes, and dispensing costs or charges. 2006 transportation sector delivered prices are model results. **Projections:** EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A14. Oil and Gas Supply

Production and Supply	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Crude Oil								
Lower 48 Average Wellhead Price¹ (2006 dollars per barrel)	52.37	60.18	78.45	57.71	52.54	55.77	60.59	0.0%
Production (million barrels per day)²								
United States Total	5.19	5.10	5.93	6.16	6.23	6.04	5.59	0.4%
Lower 48 Onshore	2.91	2.93	3.10	3.20	3.28	3.43	3.38	0.6%
Lower 48 Offshore	1.41	1.43	2.14	2.38	2.25	2.08	1.92	1.2%
Alaska	0.86	0.74	0.69	0.57	0.70	0.53	0.30	-3.7%
Lower 48 End of Year Reserves² (billion barrels)	18.85	19.02	19.89	20.93	20.78	20.72	19.89	0.2%
Natural Gas								
Prices (2006 dollars per million Btu)								
Henry Hub Spot Price	8.93	6.73	6.90	5.87	5.95	6.39	7.22	0.3%
Average Lower 48 Wellhead Price ¹	7.62	6.24	6.16	5.21	5.29	5.69	6.45	0.1%
Prices (2006 dollars per thousand cubic feet)								
Average Lower 48 Wellhead Price ¹	7.85	6.42	6.33	5.36	5.44	5.86	6.63	0.1%
Dry Production (trillion cubic feet)³								
United States Total	18.07	18.51	19.29	19.52	19.67	19.60	19.44	0.2%
Lower 48 Onshore	14.24	15.04	15.26	14.81	14.16	13.74	13.95	-0.3%
Associated-Dissolved ⁴	1.35	1.42	1.41	1.40	1.33	1.29	1.20	-0.7%
Non-Associated	12.90	13.62	13.85	13.41	12.83	12.45	12.76	-0.3%
Conventional	5.00	5.14	4.81	3.96	3.47	3.18	3.23	-1.9%
Unconventional	7.89	8.48	9.04	9.45	9.36	9.28	9.53	0.5%
Lower 48 Offshore	3.37	3.05	3.61	4.32	4.31	3.86	3.47	0.5%
Associated-Dissolved ⁴	0.68	0.62	0.73	0.95	0.97	0.87	0.77	0.9%
Non-Associated	2.69	2.43	2.88	3.37	3.35	2.99	2.69	0.4%
Alaska	0.46	0.42	0.42	0.38	1.19	2.00	2.01	6.7%
Lower 48 End of Year Dry Reserves (trillion cubic feet)	196.22	202.99	220.62	227.01	219.31	207.16	200.42	-0.1%
Supplemental Gas Supplies (trillion cubic feet)⁵	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.1%
Total Lower 48 Wells Drilled (thousands)	41.54	49.72	62.33	42.40	37.19	34.02	35.78	-1.4%

¹Represents lower 48 onshore and offshore supplies.

²Includes lease condensate.

³Marketed production (wet) minus extraction losses.

⁴Gas which occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved).

⁵Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 crude oil lower 48 average wellhead price: Energy Information Administration (EIA), *Petroleum Marketing Annual 2006*, DOE/EIA-0487(2006) (Washington, DC, August 2007). 2005 and 2006 lower 48 onshore, lower 48 offshore, and Alaska crude oil production: EIA, *Petroleum Supply Annual 2006*, DOE/EIA-0340(2006)/1 (Washington, DC, September 2007). 2005 U.S. crude oil and natural gas reserves: EIA, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, DOE/EIA-0216(2005) (Washington, DC, November 2006). 2005 Alaska and total natural gas production, and supplemental gas supplies: EIA, *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2005 natural gas lower 48 average wellhead price: Minerals Management Service and EIA, *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2006 natural gas lower 48 average wellhead price, Alaska and total natural gas production, and supplemental gas supplies: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). Other 2005 and 2006 values: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A15. Coal Supply, Disposition, and Prices
(Million Short Tons per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Production¹								
Appalachia	397	392	381	340	327	324	328	-0.7%
Interior	149	151	166	193	199	219	241	2.0%
West	585	619	619	682	745	820	885	1.5%
East of the Mississippi	494	491	488	460	447	457	481	-0.1%
West of the Mississippi	638	672	678	755	823	906	974	1.6%
Total	1131	1163	1166	1215	1270	1363	1455	0.9%
Waste Coal Supplied²	13	14	13	14	11	11	12	-0.4%
Net Imports								
Imports ³	29	34	37	42	80	93	112	5.1%
Exports	50	50	71	45	34	35	35	-1.5%
Total	-21	-15	-34	-3	46	57	78	--
Total Supply⁴	1124	1161	1144	1225	1326	1431	1545	1.2%
Consumption by Sector								
Residential and Commercial	4	4	4	4	4	4	4	-0.2%
Coke Plants	23	23	23	21	20	20	18	-0.9%
Other Industrial ⁵	60	61	64	60	59	58	58	-0.2%
Coal-to-Liquids Heat and Power	0	0	0	9	23	25	35	--
Coal to Liquids Production	0	0	0	7	19	21	29	--
Electric Power ⁶	1037	1026	1054	1125	1202	1303	1401	1.3%
Total	1125	1114	1145	1225	1327	1431	1545	1.4%
Discrepancy and Stock Change⁷	-2	47	-0	-0	-0	-0	-0	--
Average Minemouth Price⁸								
(2006 dollars per short ton)	24.08	24.63	26.16	23.38	22.51	22.75	23.32	-0.2%
(2006 dollars per million Btu)	1.18	1.21	1.28	1.17	1.14	1.16	1.19	-0.1%
Delivered Prices (2006 dollars per short ton)⁹								
Coke Plants	86.43	92.87	107.02	92.85	89.86	92.16	94.68	0.1%
Other Industrial ⁵	49.13	51.67	51.64	49.16	48.82	49.21	49.91	-0.1%
Coal to Liquids	--	--	--	14.44	16.54	18.07	20.60	--
Electric Power								
(2006 dollars per short ton)	32.01	33.85	36.62	34.24	33.84	34.03	35.03	0.1%
(2006 dollars per million Btu)	1.59	1.69	1.84	1.74	1.72	1.74	1.78	0.2%
Average	34.08	36.03	38.87	35.71	34.83	34.94	35.70	-0.0%
Exports ¹⁰	69.22	70.93	80.99	71.83	74.00	76.33	79.44	0.5%

¹Includes anthracite, bituminous coal, subbituminous coal, and lignite.

²Includes waste coal consumed by the electric power and industrial sectors. Waste coal supplied is counted as a supply-side item to balance the same amount of waste coal included in the consumption data.

³Excludes imports to Puerto Rico and the U.S. Virgin Islands.

⁴Production plus waste coal supplied plus net imports.

⁵Includes consumption for combined heat and power plants, except those plants whose primary business is to sell electricity, or electricity and heat, to the public. Excludes all coal use in the coal-to-liquids process.

⁶Includes all electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.

⁷Balancing item: the sum of production, net imports, and waste coal supplied minus total consumption.

⁸Includes reported prices for both open market and captive mines.

⁹Prices weighted by consumption; weighted average excludes residential and commercial prices, and export free-alongside-ship (f.a.s.) prices.

¹⁰F.a.s. price at U.S. port of exit.

-- = Not applicable.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 data based on: Energy Information Administration (EIA), *Annual Coal Report 2006*, DOE/EIA-0584(2006) (Washington, DC, November 2007); EIA, *Quarterly Coal Report, October-December 2006*, DOE/EIA-0121(2006/4Q) (Washington, DC, March 2007); and EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F. Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A16. Renewable Energy Generating Capacity and Generation
(Gigawatts, Unless Otherwise Noted)

Capacity and Generation	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Electric Power Sector¹								
Net Summer Capacity								
Conventional Hydropower	76.72	76.72	76.73	77.15	77.26	77.26	77.32	0.0%
Geothermal ²	2.23	2.29	2.50	2.88	3.28	3.77	4.18	2.5%
Municipal Waste ³	3.21	3.39	3.99	3.99	4.02	4.06	4.06	0.8%
Wood and Other Biomass ^{4,5}	1.96	2.01	2.20	2.74	4.39	4.84	5.58	4.3%
Solar Thermal	0.40	0.40	0.54	0.80	0.82	0.84	0.86	3.2%
Solar Photovoltaic ⁶	0.03	0.03	0.07	0.14	0.22	0.30	0.39	11.2%
Wind	8.92	11.50	25.61	29.63	33.64	37.18	40.15	5.3%
Total	93.46	96.34	111.63	117.32	123.62	128.26	132.54	1.3%
Generation (billion kilowatthours)								
Conventional Hydropower	266.91	285.07	289.47	297.22	298.00	298.09	298.53	0.2%
Geothermal ²	14.69	14.84	17.52	20.79	23.96	27.84	31.05	3.1%
Biogenic Municipal Waste ⁷	12.70	13.46	18.85	18.85	19.08	19.46	19.47	1.6%
Wood and Other Biomass ⁵	10.57	10.97	22.98	42.96	77.53	83.30	82.55	8.8%
Dedicated Plants	8.60	9.06	11.06	15.46	27.74	30.98	36.64	6.0%
Cofiring	1.97	1.91	11.92	27.51	49.79	52.32	45.91	14.2%
Solar Thermal	0.54	0.49	1.15	1.97	2.04	2.11	2.18	6.4%
Solar Photovoltaic ⁶	0.02	0.01	0.16	0.32	0.52	0.74	0.96	19.6%
Wind	17.81	25.78	74.13	87.19	101.23	113.14	123.18	6.7%
Total	323.23	350.62	424.27	469.30	522.35	544.68	557.91	2.0%
End-Use Generators⁸								
Net Summer Capacity								
Conventional Hydropower ⁹	0.71	0.70	0.70	0.70	0.70	0.70	0.70	0.0%
Geothermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Municipal Waste ¹⁰	0.34	0.35	0.35	0.35	0.35	0.35	0.35	0.0%
Biomass	4.72	4.64	4.89	6.37	8.57	12.21	12.60	4.3%
Solar Photovoltaic ⁶	0.18	0.27	0.67	0.77	1.13	1.77	2.80	10.2%
Wind	0.01	0.04	0.04	0.05	0.09	0.17	0.26	8.0%
Total	5.96	6.00	6.65	8.24	10.85	15.20	16.72	4.4%
Generation (billion kilowatthours)								
Conventional Hydropower ⁹	3.46	3.24	3.24	3.24	3.24	3.24	3.24	-0.0%
Geothermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Municipal Waste ¹⁰	1.95	2.06	2.82	2.82	2.82	2.82	2.82	1.3%
Biomass	28.33	28.44	29.98	40.50	57.00	84.74	86.99	4.8%
Solar Photovoltaic ⁶	0.28	0.43	1.07	1.25	1.85	2.97	4.76	10.6%
Wind	0.02	0.06	0.06	0.06	0.13	0.24	0.38	8.3%
Total	34.03	34.22	37.17	47.88	65.05	94.02	98.19	4.5%

¹Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.

²Includes hydrothermal resources only (hot water and steam).

³Includes all municipal waste, landfill gas, and municipal sewage sludge. Incremental growth is assumed to be for landfill gas facilities. All municipal waste is included, although a portion of the municipal waste stream contains petroleum-derived plastics and other non-renewable sources.

⁴Facilities co-firing biomass and coal are classified as coal.

⁵Includes projections for energy crops after 2012.

⁶Does not include off-grid PV. Based on annual PV shipments from 1989 through 2005, EIA estimates that as much as 192 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2005, plus an additional 481 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Energy Information Administration, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007), Table 10.8 (annual PV shipments, 1989-2005). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

⁷Includes biogenic municipal waste, landfill gas, and municipal sewage sludge. Incremental growth is assumed to be for landfill gas facilities. Only biogenic municipal waste is included. The Energy Information Administration estimates approximately 7 billion kilowatthours of electricity was generated from a municipal waste stream containing petroleum-derived plastics and other non-renewable sources. See Energy Information Administration, *Methodology for Allocating Municipal Solid Waste to Biogenic and Non-Biogenic Energy*, (Washington, DC, May 2007).

⁸Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

⁹Represents own-use industrial hydroelectric power.

¹⁰Includes municipal waste, landfill gas, and municipal sewage sludge. All municipal waste is included, although a portion of the municipal waste stream contains petroleum-derived plastics and other non-renewable sources.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 capacity: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). 2005 and 2006 generation: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A17. Renewable Energy, Consumption by Sector and Source¹
(Quadrillion Btu per Year)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Marketed Renewable Energy²								
Residential (wood)	0.45	0.41	0.44	0.42	0.40	0.39	0.38	-0.3%
Commercial (biomass)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.0%
Industrial³	1.88	1.99	2.34	2.75	3.32	4.21	4.33	3.3%
Conventional Hydroelectric	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0%
Municipal Waste ⁴	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.0%
Biomass	1.45	1.51	1.48	1.57	1.65	1.75	1.83	0.8%
Biofuels Heat and Coproducts	0.24	0.30	0.67	1.00	1.49	2.28	2.31	8.9%
Transportation	0.35	0.50	1.13	1.66	2.24	2.77	2.77	7.4%
Ethanol used in E85 ⁵	0.00	0.00	0.00	0.12	0.64	0.93	0.88	33.5%
Ethanol used in Gasoline Blending	0.34	0.47	1.05	1.22	1.18	1.13	1.13	3.7%
Biodiesel used in Distillate Blending	0.01	0.03	0.08	0.17	0.13	0.14	0.16	6.9%
Liquids from Biomass	0.00	0.00	0.00	0.15	0.29	0.56	0.60	--
Electric Power⁶	3.49	3.74	4.53	5.05	5.64	5.94	6.13	2.1%
Conventional Hydroelectric	2.67	2.86	2.89	2.96	2.97	2.97	2.97	0.2%
Geothermal	0.31	0.31	0.37	0.48	0.58	0.70	0.80	4.0%
Biogenic Municipal Waste ⁷	0.20	0.15	0.23	0.23	0.23	0.23	0.23	1.8%
Biomass	0.18	0.16	0.28	0.48	0.82	0.87	0.86	7.4%
Dedicated Plants	0.14	0.12	0.12	0.16	0.27	0.30	0.36	4.6%
Cofiring	0.04	0.03	0.16	0.33	0.55	0.57	0.49	11.9%
Solar Thermal	0.01	0.00	0.01	0.02	0.02	0.02	0.02	6.4%
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.01	0.01	0.01	19.6%
Wind	0.12	0.26	0.74	0.87	1.02	1.13	1.24	6.7%
Total Marketed Renewable Energy	6.30	6.77	8.56	10.00	11.74	13.44	13.73	3.0%
Sources of Ethanol								
From Corn	0.33	0.41	0.95	1.18	1.26	1.26	1.26	4.8%
From Cellulose	0.00	0.00	0.01	0.03	0.23	0.58	0.58	--
From Other Feedstocks	0.00	0.00	0.00	0.00	0.01	0.02	0.01	--
Net Imports	0.01	0.06	0.09	0.14	0.31	0.19	0.15	4.0%
Total	0.34	0.47	1.05	1.34	1.82	2.06	2.01	6.2%

Reference Case

Table A17. Renewable Energy, Consumption by Sector and Source¹ (Continued)
(Quadrillion Btu per Year)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Nonmarketed Renewable Energy⁸								
Selected Consumption								
Residential	0.01	0.02	0.02	0.03	0.04	0.05	0.07	5.9%
Solar Hot Water Heating	0.01	0.01	0.02	0.02	0.03	0.04	0.05	5.3%
Geothermal Heat Pumps	0.00	0.00	0.00	0.01	0.01	0.01	0.01	6.1%
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.01	16.9%
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Commercial	0.03	0.03	0.03	0.03	0.03	0.04	0.04	1.7%
Solar Thermal	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.5%
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.01	0.01	8.7%
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.9%

¹Actual heat rates used to determine fuel consumption for all renewable fuels except hydropower, solar, and wind. Consumption at hydroelectric, solar, and wind facilities determined by using the fossil fuel equivalent of 10,022 Btu per kilowatt-hour.

²Includes nonelectric renewable energy groups for which the energy source is bought and sold in the marketplace, although all transactions may not necessarily be marketed, and marketed renewable energy inputs for electricity entering the marketplace on the electric power grid. Excludes electricity imports; see Table A2.

³Includes all electricity production by industrial and other combined heat and power for the grid and for own use.

⁴Includes municipal waste, landfill gas, and municipal sewage sludge. All municipal waste is included, although a portion of the municipal waste stream contains petroleum-derived plastics and other non-renewable sources.

⁵Excludes motor gasoline component of E85.

⁶Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

⁷Includes biogenic municipal waste, landfill gas, and municipal sewage sludge. Incremental growth is assumed to be for landfill gas facilities. Only biogenic municipal waste is included. The Energy Information Administration estimates approximately .38 quadrillion Btus were consumed from a municipal waste stream containing petroleum-derived plastics and other non-renewable sources. See Energy Information Administration, *Methodology for Allocating Municipal Solid Waste to Biogenic and Non-Biogenic Energy*, (Washington, DC, May 2007).

⁸Includes selected renewable energy consumption data for which the energy is not bought or sold, either directly or indirectly as an input to marketed energy.

The Energy Information Administration does not estimate or project total consumption of nonmarketed renewable energy.

-- = Not applicable.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 ethanol: Energy Information Administration (EIA), *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 and 2006 electric power sector: EIA, Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2005 and 2006 values: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A18. Carbon Dioxide Emissions by Sector and Source
(Million Metric Tons, Unless Otherwise Noted)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Residential								
Petroleum	101	100	91	92	92	90	88	-0.5%
Natural Gas	262	237	263	274	281	284	282	0.7%
Coal	1	1	1	1	1	1	1	0.9%
Electricity ¹	890	866	904	913	949	1004	1079	0.9%
Total	1253	1204	1259	1280	1324	1379	1451	0.8%
Commercial								
Petroleum	52	53	46	48	49	49	49	-0.3%
Natural Gas	169	155	162	175	184	193	201	1.1%
Coal	9	6	8	8	8	8	8	1.0%
Electricity ¹	835	832	864	945	1024	1117	1216	1.6%
Total	1066	1046	1079	1176	1265	1367	1474	1.4%
Industrial²								
Petroleum	412	421	435	442	432	428	436	0.1%
Natural Gas ³	409	399	430	435	434	437	433	0.3%
Coal	189	189	186	185	204	206	217	0.6%
Electricity ¹	668	642	640	656	649	645	647	0.0%
Total	1677	1652	1693	1718	1718	1716	1733	0.2%
Transportation								
Petroleum ⁴	1948	1952	1940	2010	2032	2062	2145	0.4%
Natural Gas ⁵	33	33	36	38	40	43	43	1.2%
Electricity ¹	4	4	4	5	5	5	5	1.2%
Total	1985	1989	1980	2052	2077	2110	2193	0.4%
Electric Power⁶								
Petroleum	101	55	43	44	45	47	48	-0.5%
Natural Gas	321	340	365	358	323	289	272	-0.9%
Coal	1964	1938	1993	2105	2247	2423	2615	1.3%
Other ⁷	12	12	12	12	12	12	12	0.1%
Total	2397	2344	2413	2519	2627	2771	2948	1.0%
Total by Fuel								
Petroleum ³	2615	2581	2555	2636	2650	2676	2767	0.3%
Natural Gas	1193	1163	1256	1279	1262	1245	1231	0.2%
Coal	2162	2134	2188	2299	2459	2638	2841	1.2%
Other ⁷	12	12	12	12	12	12	12	0.1%
Total	5982	5890	6011	6226	6384	6571	6851	0.6%
Carbon Dioxide Emissions								
(tons per person)	20.1	19.6	19.3	19.2	18.9	18.7	18.7	-0.2%

¹Emissions from the electric power sector are distributed to the end-use sectors.

²Fuel consumption includes energy for combined heat and power plants (CHP), except those plants whose primary business is to sell electricity, or electricity and heat, to the public.

³Includes lease and plant fuel.

⁴This includes carbon dioxide from international bunker fuels, both civilian and military, which are excluded from the accounting of carbon dioxide emissions under the United Nations convention. From 1990 through 2006, international bunker fuels accounted for 84 to 126 million metric tons annually.

⁵Includes pipeline fuel natural gas and compressed natural gas used as vehicle fuel.

⁶Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.

⁷Includes emissions from geothermal power and nonbiogenic emissions from municipal waste.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 emissions and emission factors: Energy Information Administration (EIA), *Emissions of Greenhouse Gases in the United States 2006*, DOE/EIA-0573(2006) (Washington, DC, November 2007). Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Reference Case

Table A19. Macroeconomic Indicators
(Billion 2000 Chain-Weighted Dollars, Unless Otherwise Noted)

Indicators	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Real Gross Domestic Product	11004	11319	12453	14199	15984	17951	20219	2.4%
Components of Real Gross Domestic Product								
Real Consumption	7804	8044	8845	10151	11362	12628	13999	2.3%
Real Investment	1869	1920	1939	2307	2614	3088	3743	2.8%
Real Government Spending	1946	1981	2087	2164	2258	2352	2471	0.9%
Real Exports	1203	1304	1797	2455	3387	4582	6191	6.7%
Real Imports	1821	1929	2190	2796	3474	4415	5723	4.6%
Energy Intensity (thousand Btu per 2000 dollar of GDP)								
Delivered Energy	6.62	6.39	6.03	5.48	5.00	4.57	4.16	-1.8%
Total Energy	9.09	8.79	8.30	7.54	6.91	6.35	5.80	-1.7%
Price Indices								
GDP Chain-type Price Index (2000=1.000) . . .	1.130	1.166	1.260	1.375	1.520	1.686	1.871	2.0%
Consumer Price Index (1982-4=1.00)								
All-urban	1.95	2.02	2.20	2.38	2.64	2.94	3.29	2.1%
Energy Commodities and Services	1.77	1.97	2.15	2.15	2.43	2.73	3.14	2.0%
Wholesale Price Index (1982=1.00)								
All Commodities	1.57	1.65	1.80	1.84	1.96	2.10	2.26	1.3%
Fuel and Power	1.56	1.67	1.88	1.82	2.04	2.34	2.75	2.1%
Interest Rates (percent, nominal)								
Federal Funds Rate	3.21	4.96	4.69	4.71	4.92	4.85	4.91	--
10-Year Treasury Note	4.29	4.79	5.24	5.20	5.44	5.41	5.46	--
AA Utility Bond Rate	5.44	5.84	6.65	6.71	6.98	7.01	7.13	--
Value of Shipments (billion 2000 dollars)								
Total Industrial	5732	5821	5997	6659	7113	7546	7997	1.3%
Nonmanufacturing	1525	1531	1419	1583	1619	1663	1715	0.5%
Manufacturing	4208	4290	4577	5076	5493	5883	6283	1.6%
Energy-Intensive	1207	1225	1283	1351	1387	1418	1447	0.7%
Non-energy Intensive	3001	3065	3295	3725	4107	4465	4836	1.9%
Population and Employment (millions)								
Population, with Armed Forces Overseas	297.3	300.1	310.9	324.3	337.7	351.4	365.6	0.8%
Population, aged 16 and over	232.2	235.0	244.9	255.3	266.0	277.3	289.3	0.9%
Population, over age 65	36.9	37.3	40.4	47.0	54.9	63.8	71.6	2.8%
Employment, Nonfarm	133.6	136.1	142.4	149.7	154.5	160.9	168.1	0.9%
Employment, Manufacturing	14.2	14.2	14.2	14.4	13.8	12.5	11.2	-1.0%
Key Labor Indicators								
Labor Force (millions)	149.3	151.4	156.8	162.1	165.6	171.0	177.9	0.7%
Nonfarm Labor Productivity (1992=1.00)	1.34	1.35	1.45	1.60	1.77	1.95	2.14	1.9%
Unemployment Rate (percent)	5.07	4.63	5.03	4.58	4.62	4.79	4.80	--
Key Indicators for Energy Demand								
Real Disposable Personal Income	8148	8397	9472	11055	12654	14349	16246	2.8%
Housing Starts (millions)	2.22	1.93	1.68	1.88	1.78	1.74	1.70	-0.5%
Commercial Floorspace (billion square feet) . .	73.8	74.8	78.8	83.9	89.3	94.8	100.8	1.2%
Unit Sales of Light-Duty Vehicles (millions) . .	16.95	16.50	16.38	17.75	17.47	18.35	19.39	0.7%

GDP = Gross domestic product.

Btu = British thermal unit.

-- = Not applicable.

Sources: 2005 and 2006: Global Insight, Global Insight Industry and Employment models, July 2007. Projections: Energy Information Administration, AEO2008 National Energy Modeling System run AEO2008.D030208F.

Table A20. International Liquids Supply and Disposition Summary
(Million Barrels per Day, Unless Otherwise Noted)

Supply and Disposition	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Crude Oil Prices (2006 dollars per barrel)¹								
Imported Low Sulfur Light Crude Oil	58.28	66.02	74.03	59.85	59.70	64.49	70.45	0.3%
Imported Crude Oil	50.40	59.05	65.18	52.03	51.55	55.68	58.66	-0.0%
Conventional Production (Conventional)²								
OPEC ³								
Asia	1.15	1.11	1.03	0.99	0.98	0.99	0.94	-0.7%
Middle East	22.50	23.21	22.41	23.40	24.09	25.24	27.35	0.7%
North Africa	3.81	3.90	4.28	4.63	4.78	4.84	4.82	0.9%
West Africa	4.03	4.02	5.77	6.88	7.41	7.80	8.23	3.0%
South America	2.21	2.06	1.99	2.20	2.18	2.17	2.16	0.2%
Total OPEC	33.71	34.30	35.48	38.09	39.45	41.04	43.50	1.0%
Non-OPEC								
OECD								
United States (50 states)	8.04	7.91	8.84	9.12	9.15	8.84	8.39	0.2%
Canada	1.99	2.00	1.85	1.56	1.32	1.16	1.05	-2.7%
Mexico	3.79	3.74	3.37	3.29	3.25	3.24	3.35	-0.5%
OECD Europe ⁴	5.94	5.52	4.89	4.05	3.59	3.43	3.39	-2.0%
Japan	0.13	0.13	0.12	0.13	0.14	0.15	0.15	0.8%
Australia and New Zealand	0.59	0.57	0.62	0.64	0.65	0.66	0.66	0.6%
Total OECD	20.48	19.85	19.69	18.78	18.10	17.48	16.99	-0.6%
Non-OECD								
Russia	9.58	9.82	10.34	10.60	10.90	11.37	11.69	0.7%
Other Eurasia ⁵	2.65	2.85	3.77	4.83	5.46	5.88	6.36	3.4%
China	3.74	3.80	3.83	3.87	3.87	3.70	3.53	-0.3%
Other Asia ⁶	2.77	2.89	2.92	3.22	3.40	3.43	3.17	0.4%
Middle East ⁷	1.67	1.69	2.00	2.20	2.40	2.70	2.90	2.3%
Africa	2.47	2.49	2.92	3.35	3.83	4.04	3.99	2.0%
Brazil	1.75	1.84	2.40	2.94	3.39	3.65	3.66	2.9%
Other Central and South America	2.36	2.36	2.32	2.49	2.67	3.03	3.51	1.7%
Total Non-OECD	26.98	27.73	30.51	33.49	35.94	37.80	38.81	1.4%
Total Conventional Production	81.17	81.88	85.67	90.37	93.48	96.31	99.30	0.8%
Unconventional Production⁸								
United States (50 states)	0.26	0.34	0.78	1.15	1.53	1.97	2.06	7.9%
Other North America	1.09	1.23	1.91	2.34	2.85	3.41	3.96	5.0%
OECD Europe ³	0.03	0.04	0.07	0.10	0.15	0.19	0.26	8.4%
Middle East ⁷	0.00	0.00	0.03	0.18	0.31	0.62	1.24	25.8%
Africa	0.15	0.17	0.31	0.36	0.44	0.59	0.83	6.9%
Central and South America	0.79	0.80	1.18	1.45	1.76	2.09	2.51	4.9%
Other	0.16	0.20	0.44	0.76	1.28	1.96	3.15	12.1%
Total Unconventional Production	2.48	2.78	4.73	6.34	8.32	10.83	14.00	7.0%
Total Production	83.65	84.66	90.40	96.70	101.80	107.14	113.31	1.2%

Reference Case

Table A20. International Liquids Supply and Disposition Summary (Continued)
(Million Barrels per Day, Unless Otherwise Noted)

Supply and Disposition	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
Consumption⁹								
OECD								
United States (50 states)	20.80	20.65	20.99	21.59	21.47	21.52	22.11	0.3%
United States Territories	0.37	0.38	0.43	0.47	0.51	0.55	0.59	1.9%
Canada	2.26	2.27	2.32	2.34	2.36	2.38	2.40	0.2%
Mexico	2.03	2.06	2.19	2.36	2.61	2.75	2.95	1.5%
OECD Europe ³	15.42	15.42	15.47	15.63	15.71	15.79	15.86	0.1%
Japan	5.16	5.16	5.18	5.21	5.22	5.24	5.26	0.1%
South Korea	2.17	2.18	2.25	2.47	2.57	2.68	2.81	1.1%
Australia and New Zealand	1.03	1.03	1.07	1.13	1.19	1.25	1.28	0.9%
Total OECD	49.24	49.16	49.90	51.20	51.64	52.16	53.28	0.3%
Non-OECD								
Russia	2.77	2.79	2.89	3.03	3.13	3.25	3.32	0.7%
Other Non-OECD Eurasia ⁵	2.05	2.09	2.26	2.43	2.64	2.79	2.96	1.5%
China	6.73	7.26	9.44	10.55	11.96	13.63	15.69	3.3%
India	2.44	2.49	2.68	3.25	3.62	4.03	4.37	2.4%
Other Non-OECD Asia	6.02	6.14	6.67	7.64	8.35	9.08	9.86	2.0%
Middle East ⁷	5.91	6.15	7.13	7.79	8.46	9.18	9.84	2.0%
Africa	2.90	2.99	3.36	3.88	4.35	4.62	4.93	2.1%
Brazil	2.40	2.34	2.57	2.87	3.15	3.42	3.68	1.9%
Other Central and South America	3.17	3.26	3.51	4.05	4.51	4.98	5.37	2.1%
Total Non-OECD	34.41	35.51	40.51	45.50	50.16	54.98	60.02	2.2%
Total Consumption	83.65	84.66	90.40	96.70	101.80	107.14	113.30	1.2%
OPEC Production ¹⁰	34.31	34.90	36.40	39.26	40.87	42.91	46.16	1.2%
Non-OPEC Production ¹⁰	49.34	49.76	54.00	57.44	60.94	64.23	67.15	1.3%
Net Eurasia Exports	9.15	9.63	11.37	12.91	13.98	14.86	15.43	2.0%
OPEC Market Share (percent)	41.0	41.2	40.3	40.6	40.1	40.0	40.7	-0.0%

¹Weighted average price delivered to U.S. refiners.

²Includes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, alcohol and other sources, and refinery gains.

³OPEC = Organization of Petroleum Exporting Countries - Algeria, Angola, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. Does not include Ecuador, which was admitted to OPEC as a full member on November 17, 2007.

⁴OECD Europe = Organization for Economic Cooperation and Development - Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

⁵Eurasia consists of Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

⁶Other Asia = Afghanistan, Bangladesh, Bhutan, Brunei, Cambodia (Kampuchea), Fiji, French Polynesia, Guam, Hong Kong, Indonesia, Kiribati, Laos, Malaysia, Macau, Maldives, Mongolia, Myanmar (Burma), Nauru, Nepal, New Caledonia, Niue, North Korea, Pakistan, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Sri Lanka, Taiwan, Thailand, Tonga, Vanuatu, and Vietnam.

⁷Non-OPEC Middle East includes Turkey.

⁸Includes liquids produced from energy crops, natural gas, coal, oil sands, and shale. Includes both OPEC and non-OPEC producers in the regional breakdown.

⁹Includes both OPEC and non-OPEC consumers in the regional breakdown.

¹⁰Includes both conventional and nonconventional liquids production.

- - = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2005 and 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2005 and 2006 low sulfur light crude oil price: Energy Information Administration (EIA), Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report." 2005 and 2006 imported crude oil price: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2005 quantities derived from: EIA, *International Energy Annual 2005*, DOE/EIA-0219(2005) (Washington, DC, June-October 2007). **2006 quantities and projections:** EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F.