

**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	
<b>Production</b>								
Crude Oil and Lease Condensate .....	10.99	10.80	12.71	13.05	13.76	12.89	12.12	0.5%
Natural Gas Plant Liquids .....	2.33	2.36	2.21	2.22	2.27	2.24	2.18	-0.3%
Dry Natural Gas .....	18.60	19.04	19.61	19.91	20.28	20.24	20.41	0.3%
Coal <sup>1</sup> .....	23.19	23.79	23.31	24.33	25.61	28.43	31.16	1.1%
Nuclear Power .....	8.16	8.21	8.31	8.41	9.15	9.68	9.89	0.8%
Hydropower .....	2.70	2.89	2.92	3.00	3.00	3.00	3.00	0.2%
Biomass <sup>2</sup> .....	2.83	2.97	4.11	4.44	4.93	5.31	5.52	2.6%
Other Renewable Energy <sup>3</sup> .....	0.67	0.88	1.50	1.73	1.99	2.28	2.49	4.5%
Other <sup>4</sup> .....	0.35	0.42	0.55	0.60	0.64	0.69	0.72	2.2%
<b>Total</b> .....	<b>69.83</b>	<b>71.35</b>	<b>75.22</b>	<b>77.70</b>	<b>81.62</b>	<b>84.77</b>	<b>87.48</b>	<b>0.9%</b>
<b>Imports</b>								
Crude Oil .....	22.09	22.08	21.22	22.31	22.44	24.24	26.15	0.7%
Liquid Fuels and Other Petroleum <sup>5</sup> .....	7.23	7.21	6.05	6.22	7.14	7.80	7.98	0.4%
Natural Gas .....	4.45	4.29	4.92	5.63	5.43	5.26	4.86	0.5%
Other Imports <sup>6</sup> .....	0.85	0.98	0.95	1.04	1.93	2.08	2.71	4.3%
<b>Total</b> .....	<b>34.62</b>	<b>34.57</b>	<b>33.14</b>	<b>35.21</b>	<b>36.94</b>	<b>39.38</b>	<b>41.70</b>	<b>0.8%</b>
<b>Exports</b>								
Petroleum <sup>7</sup> .....	2.32	2.60	2.78	2.84	2.87	2.90	2.93	0.5%
Natural Gas .....	0.74	0.73	0.79	0.98	1.03	1.25	1.35	2.6%
Coal .....	1.27	1.26	1.21	0.88	0.90	0.94	0.92	-1.3%
<b>Total</b> .....	<b>4.32</b>	<b>4.59</b>	<b>4.78</b>	<b>4.70</b>	<b>4.79</b>	<b>5.09</b>	<b>5.20</b>	<b>0.5%</b>
<b>Discrepancy<sup>8</sup></b> .....	<b>-0.26</b>	<b>1.33</b>	<b>-0.06</b>	<b>0.09</b>	<b>0.16</b>	<b>0.21</b>	<b>0.22</b>	<b>--</b>
<b>Consumption</b>								
Liquid Fuels and Other Petroleum <sup>9</sup> .....	40.53	40.39	40.82	42.46	44.41	46.38	48.23	0.7%
Natural Gas .....	22.85	22.42	23.90	24.72	24.83	24.40	24.07	0.3%
Coal .....	22.78	22.52	22.94	24.24	26.23	28.89	31.71	1.4%
Nuclear Power .....	8.16	8.21	8.31	8.41	9.15	9.68	9.89	0.8%
Hydropower .....	2.70	2.89	2.92	3.00	3.00	3.00	3.00	0.2%
Biomass <sup>10</sup> .....	2.49	2.52	3.08	3.39	3.83	4.04	4.17	2.1%
Other Renewable Energy <sup>3</sup> .....	0.67	0.88	1.50	1.73	1.99	2.28	2.49	4.5%
Other <sup>11</sup> .....	0.21	0.19	0.18	0.17	0.18	0.18	0.20	0.2%
<b>Total</b> .....	<b>100.39</b>	<b>100.00</b>	<b>103.64</b>	<b>108.12</b>	<b>113.61</b>	<b>118.85</b>	<b>123.76</b>	<b>0.9%</b>

**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	
<b>Prices (2006 dollars per unit)</b>								
Petroleum (dollars per barrel)								
Imported Low Sulfur Light Crude Oil Price <sup>12</sup> . . .	58.28	66.02	66.89	59.70	61.05	66.11	71.87	0.4%
Imported Crude Oil Price <sup>12</sup> . . . . .	50.40	59.05	58.93	52.03	52.80	57.11	62.07	0.2%
Natural Gas (dollars per million Btu)								
Price at Henry Hub . . . . .	8.93	6.73	6.64	5.93	5.93	6.59	7.19	0.3%
Wellhead Price <sup>13</sup> . . . . .	7.62	6.24	5.92	5.27	5.27	5.87	6.42	0.1%
Natural Gas (dollars per thousand cubic feet)								
Wellhead Price <sup>13</sup> . . . . .	7.85	6.42	6.09	5.43	5.42	6.04	6.60	0.1%
Coal (dollars per ton)								
Minemouth Price <sup>14</sup> . . . . .	24.08	24.63	24.53	23.04	22.63	23.15	23.45	-0.2%
Coal (dollars per million Btu)								
Minemouth Price <sup>14</sup> . . . . .	1.18	1.21	1.21	1.15	1.15	1.18	1.21	-0.0%
Average Delivered Price <sup>15</sup> . . . . .	1.67	1.77	1.89	1.79	1.77	1.80	1.83	0.1%
Average Electricity Price (cents per kilowatthour)	8.4	8.9	9.1	8.6	8.6	8.8	8.8	-0.0%

<sup>1</sup>Includes waste coal.  
<sup>2</sup>Includes 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.  
<sup>3</sup>Includes 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.  
<sup>4</sup>Includes non-biogenic municipal waste, liquid hydrogen, methanol, and some domestic inputs to refineries.  
<sup>5</sup>Includes imports of finished petroleum products, unfinished oils, alcohols, ethers, blending components, and renewable fuels such as ethanol.  
<sup>6</sup>Includes coal, coal coke (net), and electricity (net).  
<sup>7</sup>Includes crude oil and petroleum products.  
<sup>8</sup>Balancing item. Includes unaccounted for supply, losses, gains, and net storage withdrawals.  
<sup>9</sup>Includes petroleum-derived fuels and non-petroleum derived fuels, such as ethanol and biodiesel. 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.  
<sup>10</sup>Includes 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.  
<sup>11</sup>Includes non-biogenic municipal waste and net electricity imports.  
<sup>12</sup>Weighted average price delivered to U.S. refiners.  
<sup>13</sup>Represents lower 48 onshore and offshore supplies.  
<sup>14</sup>Includes reported prices for both open market and captive mines.  
<sup>15</sup>Prices 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.D112607A.

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

Sector and Source	Reference Case							Annual Growth 2006-2030 0 (percent)
	2005	2006	2010	2015	2020	2025	2030	
<b>Energy Consumption</b>								
<b>Residential</b>								
Liquefied Petroleum Gases .....	0.48	0.51	0.46	0.48	0.49	0.51	0.52	0.1%
Kerosene .....	0.09	0.07	0.08	0.08	0.08	0.08	0.08	0.1%
Distillate Fuel Oil .....	0.88	0.87	0.81	0.80	0.76	0.71	0.67	-1.1%
Liquid Fuels and Other Petroleum Subtotal ..	1.45	1.45	1.36	1.36	1.34	1.30	1.26	-0.6%
Natural Gas .....	4.93	4.47	4.96	5.16	5.31	5.34	5.34	0.7%
Coal .....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.4%
Renewable Energy <sup>1</sup> .....	0.49	0.47	0.48	0.46	0.45	0.44	0.43	-0.4%
Electricity .....	4.64	4.62	4.94	5.26	5.54	5.86	6.23	1.3%
<b>Delivered Energy</b> .....	<b>11.52</b>	<b>11.01</b>	<b>11.74</b>	<b>12.24</b>	<b>12.65</b>	<b>12.94</b>	<b>13.26</b>	<b>0.8%</b>
Electricity Related Losses .....	10.12	10.05	10.60	11.07	11.63	12.22	12.76	1.0%
<b>Total</b> .....	<b>21.64</b>	<b>21.06</b>	<b>22.34</b>	<b>23.31</b>	<b>24.28</b>	<b>25.17</b>	<b>26.03</b>	<b>0.9%</b>
<b>Commercial</b>								
Liquefied Petroleum Gases .....	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.5%
Motor Gasoline <sup>2</sup> .....	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	0.46	0.42	0.44	0.45	0.44	0.44	-0.1%
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 ..	0.73	0.73	0.68	0.71	0.72	0.72	0.72	-0.0%
Natural Gas .....	3.18	3.00	3.14	3.37	3.56	3.72	3.89	1.1%
Coal .....	0.09	0.08	0.08	0.08	0.08	0.08	0.08	-0.1%
Renewable Energy <sup>3</sup> .....	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.0%
Electricity .....	4.35	4.44	4.74	5.21	5.70	6.17	6.65	1.7%
<b>Delivered Energy</b> .....	<b>8.47</b>	<b>8.38</b>	<b>8.78</b>	<b>9.50</b>	<b>10.20</b>	<b>10.82</b>	<b>11.48</b>	<b>1.3%</b>
Electricity Related Losses .....	9.50	9.65	10.19	10.97	11.98	12.89	13.63	1.4%
<b>Total</b> .....	<b>17.97</b>	<b>18.03</b>	<b>18.96</b>	<b>20.47</b>	<b>22.18</b>	<b>23.71</b>	<b>25.10</b>	<b>1.4%</b>
<b>Industrial<sup>4</sup></b>								
Liquefied Petroleum Gases .....	2.13	2.18	2.14	2.06	2.05	2.06	1.98	-0.4%
Motor Gasoline <sup>2</sup> .....	0.37	0.38	0.37	0.38	0.38	0.39	0.40	0.2%
Distillate Fuel Oil .....	1.23	1.28	1.26	1.26	1.26	1.26	1.28	-0.0%
Residual Fuel Oil .....	0.28	0.29	0.27	0.27	0.24	0.23	0.23	-1.0%
Petrochemical Feedstocks .....	1.41	1.41	1.36	1.37	1.41	1.44	1.40	-0.0%
Other Petroleum <sup>5</sup> .....	4.43	4.47	4.21	4.27	4.33	4.47	4.61	0.1%
Liquid Fuels and Other Petroleum Subtotal ..	9.85	10.01	9.61	9.62	9.67	9.84	9.90	-0.0%
Natural Gas .....	6.94	6.74	7.14	7.13	7.27	7.41	7.47	0.4%
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 <sup>6</sup> .....	1.14	1.17	1.20	1.22	1.25	1.28	1.29	0.4%
Natural Gas Subtotal .....	8.09	7.91	8.35	8.35	8.53	8.68	8.77	0.4%
Metallurgical Coal .....	0.62	0.60	0.57	0.55	0.56	0.56	0.53	-0.5%
Other Industrial Coal .....	1.29	1.28	1.25	1.21	1.20	1.20	1.20	-0.3%
Coal-to-Liquids Heat and Power .....	0.00	0.00	0.00	0.19	0.36	0.70	1.33	--
Net Coal Coke Imports .....	0.04	0.06	0.03	0.03	0.04	0.04	0.04	-1.3%
Coal Subtotal .....	1.95	1.95	1.85	1.98	2.16	2.50	3.11	2.0%
Biofuels Heat and Coproducts .....	0.24	0.30	0.71	0.71	0.73	0.75	0.79	4.1%
Renewable Energy <sup>7</sup> .....	1.64	1.65	1.65	1.72	1.82	1.92	2.01	0.8%
Electricity .....	3.48	3.42	3.44	3.52	3.64	3.71	3.74	0.4%
<b>Delivered Energy</b> .....	<b>25.24</b>	<b>25.23</b>	<b>25.60</b>	<b>25.90</b>	<b>26.55</b>	<b>27.42</b>	<b>28.32</b>	<b>0.5%</b>
Electricity Related Losses .....	7.59	7.43	7.39	7.42	7.65	7.75	7.67	0.1%
<b>Total</b> .....	<b>32.83</b>	<b>32.67</b>	<b>33.00</b>	<b>33.32</b>	<b>34.20</b>	<b>35.16</b>	<b>35.98</b>	<b>0.4%</b>

**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	
<b>Transportation</b>								
Liquefied Petroleum Gases .....	0.01	0.02	0.02	0.01	0.01	0.01	0.01	-0.7%
E85 <sup>8</sup> .....	0.00	0.00	0.00	0.00	0.00	0.01	0.02	11.1%
Motor Gasoline <sup>2</sup> .....	17.02	17.20	17.55	18.37	19.32	20.13	20.91	0.8%
Jet Fuel <sup>9</sup> .....	3.22	3.16	3.47	3.81	4.16	4.50	4.80	1.8%
Distillate Fuel Oil <sup>10</sup> .....	5.99	6.18	6.54	7.01	7.57	8.22	8.93	1.5%
Residual Fuel Oil .....	0.83	0.83	0.85	0.85	0.86	0.87	0.88	0.2%
Liquid Hydrogen .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.8%
Other Petroleum <sup>11</sup> .....	0.19	0.18	0.17	0.18	0.18	0.18	0.18	0.1%
Liquid Fuels and Other Petroleum Subtotal .	27.26	27.56	28.60	30.23	32.11	33.92	35.74	1.1%
Pipeline Fuel Natural Gas .....	0.60	0.59	0.63	0.65	0.69	0.72	0.73	0.9%
Compressed Natural Gas .....	0.01	0.02	0.03	0.05	0.07	0.08	0.09	6.4%
Electricity .....	0.02	0.02	0.02	0.03	0.03	0.03	0.03	1.4%
<b>Delivered Energy</b> .....	<b>27.90</b>	<b>28.20</b>	<b>29.29</b>	<b>30.96</b>	<b>32.90</b>	<b>34.75</b>	<b>36.58</b>	<b>1.1%</b>
Electricity Related Losses .....	0.05	0.05	0.05	0.05	0.06	0.06	0.06	1.2%
<b>Total</b> .....	<b>27.95</b>	<b>28.25</b>	<b>29.34</b>	<b>31.02</b>	<b>32.95</b>	<b>34.81</b>	<b>36.65</b>	<b>1.1%</b>
<b>Delivered Energy Consumption for All Sectors</b>								
Liquefied Petroleum Gases .....	2.71	2.79	2.71	2.65	2.66	2.68	2.61	-0.3%
E85 <sup>8</sup> .....	0.00	0.00	0.00	0.00	0.00	0.01	0.02	11.1%
Motor Gasoline <sup>2</sup> .....	17.44	17.62	17.97	18.80	19.75	20.57	21.37	0.8%
Jet Fuel <sup>9</sup> .....	3.22	3.16	3.47	3.81	4.16	4.50	4.80	1.8%
Kerosene .....	0.13	0.11	0.12	0.12	0.12	0.11	0.11	0.1%
Distillate Fuel Oil .....	8.55	8.79	9.03	9.51	10.03	10.63	11.33	1.1%
Residual Fuel Oil .....	1.23	1.24	1.22	1.22	1.20	1.21	1.21	-0.1%
Petrochemical Feedstocks .....	1.41	1.41	1.36	1.37	1.41	1.44	1.40	-0.0%
Liquid Hydrogen .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.8%
Other Petroleum <sup>12</sup> .....	4.59	4.63	4.37	4.43	4.49	4.63	4.77	0.1%
Liquid Fuels and Other Petroleum Subtotal .	39.29	39.74	40.25	41.91	43.84	45.78	47.62	0.8%
Natural Gas .....	15.07	14.24	15.28	15.71	16.22	16.55	16.79	0.7%
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 <sup>6</sup> .....	1.14	1.17	1.20	1.22	1.25	1.28	1.29	0.4%
Pipeline Natural Gas .....	0.60	0.59	0.63	0.65	0.69	0.72	0.73	0.9%
Natural Gas Subtotal .....	16.81	16.00	17.11	17.58	18.16	18.54	18.81	0.7%
Metallurgical Coal .....	0.62	0.60	0.57	0.55	0.56	0.56	0.53	-0.5%
Other Coal .....	1.38	1.38	1.34	1.31	1.29	1.29	1.29	-0.3%
Coal-to-Liquids Heat and Power .....	0.00	0.00	0.00	0.19	0.36	0.70	1.33	--
Net Coal Coke Imports .....	0.04	0.06	0.03	0.03	0.04	0.04	0.04	-1.3%
Coal Subtotal .....	2.04	2.04	1.94	2.07	2.25	2.59	3.20	1.9%
Biofuels Heat and Coproducts .....	0.24	0.30	0.71	0.71	0.73	0.75	0.79	4.1%
Renewable Energy <sup>13</sup> .....	2.26	2.24	2.26	2.31	2.40	2.49	2.56	0.6%
Electricity .....	12.49	12.50	13.15	14.01	14.91	15.77	16.65	1.2%
<b>Delivered Energy</b> .....	<b>73.13</b>	<b>72.82</b>	<b>75.41</b>	<b>78.60</b>	<b>82.29</b>	<b>85.93</b>	<b>89.64</b>	<b>0.9%</b>
Electricity Related Losses .....	27.26	27.18	28.23	29.52	31.32	32.92	34.12	1.0%
<b>Total</b> .....	<b>100.39</b>	<b>100.00</b>	<b>103.64</b>	<b>108.12</b>	<b>113.61</b>	<b>118.85</b>	<b>123.76</b>	<b>0.9%</b>
<b>Electric Power<sup>14</sup></b>								
Distillate Fuel Oil .....	0.21	0.18	0.18	0.17	0.20	0.22	0.22	0.8%
Residual Fuel Oil .....	1.03	0.46	0.39	0.37	0.38	0.39	0.39	-0.7%
Liquid Fuels and Other Petroleum Subtotal .	1.24	0.64	0.57	0.55	0.57	0.60	0.61	-0.2%
Natural Gas .....	6.04	6.42	6.79	7.14	6.66	5.85	5.26	-0.8%
Steam Coal .....	20.74	20.48	21.00	22.17	23.98	26.30	28.51	1.4%
Nuclear Power .....	8.16	8.21	8.31	8.41	9.15	9.68	9.89	0.8%
Renewable Energy <sup>15</sup> .....	3.36	3.74	4.52	5.10	5.68	6.08	6.31	2.2%
Electricity Imports .....	0.08	0.06	0.06	0.04	0.05	0.05	0.07	0.7%
<b>Total<sup>16</sup></b> .....	<b>39.75</b>	<b>39.68</b>	<b>41.38</b>	<b>43.53</b>	<b>46.23</b>	<b>48.69</b>	<b>50.77</b>	<b>1.0%</b>

**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	
<b>Total Energy Consumption</b>								
Liquefied Petroleum Gases .....	2.71	2.79	2.71	2.65	2.66	2.68	2.61	-0.3%
E85 <sup>8</sup> .....	0.00	0.00	0.00	0.00	0.00	0.01	0.02	11.1%
Motor Gasoline <sup>2</sup> .....	17.44	17.62	17.97	18.80	19.75	20.57	21.37	0.8%
Jet Fuel <sup>9</sup> .....	3.22	3.16	3.47	3.81	4.16	4.50	4.80	1.8%
Kerosene .....	0.13	0.11	0.12	0.12	0.12	0.11	0.11	0.1%
Distillate Fuel Oil .....	8.76	8.97	9.21	9.68	10.23	10.85	11.55	1.1%
Residual Fuel Oil .....	2.26	1.70	1.61	1.59	1.58	1.59	1.60	-0.3%
Petrochemical Feedstocks .....	1.41	1.41	1.36	1.37	1.41	1.44	1.40	-0.0%
Liquid Hydrogen .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.8%
Other Petroleum <sup>12</sup> .....	4.59	4.63	4.37	4.43	4.49	4.63	4.77	0.1%
Liquid Fuels and Other Petroleum Subtotal ..	40.53	40.39	40.82	42.46	44.41	46.38	48.23	0.7%
Natural Gas .....	21.10	20.65	22.06	22.85	22.88	22.40	22.05	0.3%
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 <sup>6</sup> .....	1.14	1.17	1.20	1.22	1.25	1.28	1.29	0.4%
Pipeline Natural Gas .....	0.60	0.59	0.63	0.65	0.69	0.72	0.73	0.9%
Natural Gas Subtotal .....	22.85	22.42	23.90	24.72	24.83	24.40	24.07	0.3%
Metallurgical Coal .....	0.62	0.60	0.57	0.55	0.56	0.56	0.53	-0.5%
Other Coal .....	22.12	21.86	22.35	23.47	25.27	27.59	29.80	1.3%
Coal-to-Liquids Heat and Power .....	0.00	0.00	0.00	0.19	0.36	0.70	1.33	--
Net Coal Coke Imports .....	0.04	0.06	0.03	0.03	0.04	0.04	0.04	-1.3%
Coal Subtotal .....	22.78	22.52	22.94	24.24	26.23	28.89	31.71	1.4%
Nuclear Power .....	8.16	8.21	8.31	8.41	9.15	9.68	9.89	0.8%
Biofuels Heat and Coproducts .....	0.24	0.30	0.71	0.71	0.73	0.75	0.79	4.1%
Renewable Energy <sup>17</sup> .....	5.62	5.99	6.78	7.41	8.08	8.57	8.87	1.7%
Electricity Imports .....	0.08	0.06	0.06	0.04	0.05	0.05	0.07	0.7%
<b>Total</b> .....	<b>100.39</b>	<b>100.00</b>	<b>103.64</b>	<b>108.12</b>	<b>113.61</b>	<b>118.85</b>	<b>123.76</b>	<b>0.9%</b>
<b>Energy Use and Related Statistics</b>								
Delivered Energy Use .....	73.13	72.82	75.41	78.60	82.29	85.93	89.64	0.9%
Total Energy Use .....	100.39	100.00	103.64	108.12	113.61	118.85	123.76	0.9%
Ethanol Consumed in Motor Gasoline and E85	0.34	0.47	1.08	1.16	1.24	1.31	1.43	4.7%
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	12555	14222	16177	18334	20832	2.6%
Carbon Dioxide Emissions (million metric tons)	5981.5	5890.3	6034.1	6316.5	6645.8	6997.3	7372.9	0.9%

<sup>1</sup>Includes 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.

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

<sup>3</sup>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.

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

<sup>5</sup>Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

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

<sup>7</sup>Includes consumption of energy produced from hydroelectric, wood and wood waste, municipal waste, and other biomass sources.

<sup>8</sup>E85 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.

<sup>9</sup>Includes only kerosene type.

<sup>10</sup>Diesel fuel for on- and off- road use.

<sup>11</sup>Includes aviation gasoline and lubricants.

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

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

<sup>14</sup>Includes 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.

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

<sup>16</sup>Includes non-biogenic municipal waste not included above.

<sup>17</sup>Includes hydroelectric, geothermal, wood and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, 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.D112607A.

**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	
<b>Residential</b>								
Liquefied Petroleum Gases .....	18.83	21.87	25.14	24.36	24.31	24.93	25.48	0.6%
Distillate Fuel Oil .....	16.98	17.94	16.10	14.42	14.92	15.96	16.97	-0.2%
Natural Gas .....	12.85	13.40	12.09	11.41	11.48	12.21	12.93	-0.1%
Electricity .....	28.52	30.53	31.06	29.70	29.62	30.09	30.23	-0.0%
<b>Commercial</b>								
Distillate Fuel Oil .....	13.82	15.60	14.15	12.72	13.22	14.28	15.31	-0.1%
Residual Fuel Oil .....	11.21	8.71	9.05	7.96	8.16	8.91	9.75	0.5%
Natural Gas .....	11.57	11.49	10.49	9.85	9.96	10.72	11.44	-0.0%
Electricity .....	26.12	27.77	27.68	25.83	25.69	26.24	26.44	-0.2%
<b>Industrial<sup>1</sup></b>								
Liquefied Petroleum Gases .....	16.60	19.72	17.66	16.87	16.85	17.48	17.92	-0.4%
Distillate Fuel Oil .....	14.50	16.39	14.66	13.59	14.06	15.14	16.14	-0.1%
Residual Fuel Oil .....	10.44	9.17	9.74	8.41	8.64	9.54	10.48	0.6%
Natural Gas <sup>2</sup> .....	8.37	7.64	7.06	6.28	6.22	6.78	7.30	-0.2%
Metallurgical Coal .....	3.16	3.39	3.70	3.37	3.36	3.45	3.53	0.2%
Other Industrial Coal .....	2.22	2.34	2.38	2.30	2.29	2.33	2.37	0.1%
Coal for Liquids .....	--	--	--	1.10	1.15	1.19	1.31	--
Electricity .....	17.25	17.97	19.07	17.50	17.30	17.70	17.84	-0.0%
<b>Transportation</b>								
Liquefied Petroleum Gases <sup>3</sup> .....	20.49	21.83	25.92	25.11	25.00	25.53	26.04	0.7%
E85 <sup>4</sup> .....	23.89	24.81	27.27	23.70	23.43	23.71	24.13	-0.1%
Motor Gasoline <sup>5</sup> .....	19.28	21.19	20.31	18.59	19.12	20.01	20.76	-0.1%
Jet Fuel <sup>6</sup> .....	13.30	14.82	14.72	13.22	13.83	14.93	15.97	0.3%
Diesel Fuel (distillate fuel oil) <sup>7</sup> .....	18.09	19.72	18.54	17.16	17.50	18.47	19.38	-0.1%
Residual Fuel Oil .....	8.68	7.99	9.58	8.76	9.00	9.93	11.02	1.3%
Natural Gas <sup>8</sup> .....	14.54	14.25	13.48	12.49	12.21	12.54	12.88	-0.4%
Electricity .....	30.79	29.64	31.32	30.08	29.92	30.26	30.62	0.1%
<b>Electric Power<sup>9</sup></b>								
Distillate Fuel Oil .....	12.62	14.27	12.55	10.87	11.33	12.37	13.35	-0.3%
Residual Fuel Oil .....	7.40	7.98	8.45	7.55	7.78	8.67	9.71	0.8%
Natural Gas .....	8.44	6.87	6.76	6.03	5.93	6.42	6.91	0.0%
Steam Coal .....	1.59	1.69	1.81	1.74	1.73	1.77	1.82	0.3%
<b>Average Price to All Users<sup>10</sup></b>								
Liquefied Petroleum Gases .....	17.00	20.15	19.16	18.43	18.45	19.10	19.66	-0.1%
E85 <sup>4</sup> .....	23.89	24.81	27.27	23.70	23.43	23.71	24.13	-0.1%
Motor Gasoline <sup>5</sup> .....	19.18	21.06	20.31	18.58	19.12	20.01	20.76	-0.1%
Jet Fuel .....	13.30	14.82	14.72	13.22	13.83	14.93	15.97	0.3%
Distillate Fuel Oil .....	17.12	18.75	17.40	16.16	16.58	17.63	18.61	-0.0%
Residual Fuel Oil .....	8.44	8.24	9.30	8.36	8.60	9.50	10.54	1.0%
Natural Gas .....	9.92	9.22	8.60	7.90	7.96	8.66	9.32	0.0%
Metallurgical Coal .....	3.16	3.39	3.70	3.37	3.36	3.45	3.53	0.2%
Other Coal .....	1.63	1.73	1.84	1.77	1.75	1.80	1.85	0.3%
Coal for Liquids .....	--	--	--	1.10	1.15	1.19	1.31	--
Electricity .....	24.55	26.11	26.70	25.20	25.11	25.67	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	
<b>Non-Renewable Energy Expenditures by Sector (billion 2006 dollars)</b>								
Residential . . . . .	220.68	228.45	239.24	239.18	249.48	266.58	283.05	0.9%
Commercial . . . . .	160.59	168.84	174.63	177.56	192.30	212.76	232.09	1.3%
Industrial . . . . .	192.38	212.41	215.20	196.70	198.88	211.79	221.26	0.2%
Transportation . . . . .	489.23	542.66	539.67	522.94	570.91	634.75	698.21	1.1%
Total Non-Renewable Expenditures . . . . .	1062.88	1152.35	1168.75	1136.38	1211.57	1325.88	1434.62	0.9%
Transportation Renewable Expenditures . . . . .	0.03	0.03	0.04	0.07	0.11	0.23	0.40	11.0%
<b>Total Expenditures . . . . .</b>	<b>1062.91</b>	<b>1152.39</b>	<b>1168.79</b>	<b>1136.45</b>	<b>1211.68</b>	<b>1326.11</b>	<b>1435.02</b>	<b>0.9%</b>

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

<sup>2</sup>Excludes use for lease and plant fuel.

<sup>3</sup>Includes Federal and State taxes while excluding county and local taxes.

<sup>4</sup>E85 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.

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

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

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

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

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

<sup>10</sup>Weighted 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.D112607A. 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.D112607A.

**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	
<b>Key Indicators</b>								
<b>Households (millions)</b>								
Single-Family .....	76.02	77.27	80.87	86.51	91.85	96.61	101.04	1.1%
Multifamily .....	27.81	28.09	29.10	30.49	31.99	33.55	35.16	0.9%
Mobile Homes .....	7.26	7.19	6.94	6.83	6.84	6.83	6.84	-0.2%
<b>Total .....</b>	<b>111.09</b>	<b>112.55</b>	<b>116.91</b>	<b>123.82</b>	<b>130.68</b>	<b>136.99</b>	<b>143.03</b>	<b>1.0%</b>
<b>Average House Square Footage .....</b>	<b>1761</b>	<b>1776</b>	<b>1825</b>	<b>1887</b>	<b>1941</b>	<b>1988</b>	<b>2029</b>	<b>0.6%</b>
<b>Energy Intensity</b>								
<b>(million Btu per household)</b>								
Delivered Energy Consumption .....	103.7	97.8	100.4	98.8	96.8	94.5	92.7	-0.2%
Total Energy Consumption .....	194.8	187.1	191.1	188.3	185.8	183.7	182.0	-0.1%
<b>(thousand Btu per square foot)</b>								
Delivered Energy Consumption .....	58.9	55.1	55.0	52.4	49.9	47.5	45.7	-0.8%
Total Energy Consumption .....	110.6	105.4	104.7	99.8	95.7	92.4	89.7	-0.7%
<b>Delivered Energy Consumption by Fuel</b>								
<b>Electricity</b>								
Space Heating .....	0.43	0.40	0.43	0.45	0.47	0.47	0.48	0.8%
Space Cooling .....	0.77	0.72	0.74	0.79	0.86	0.92	0.98	1.3%
Water Heating .....	0.38	0.38	0.39	0.41	0.43	0.44	0.44	0.6%
Refrigeration .....	0.40	0.40	0.38	0.37	0.38	0.39	0.41	0.1%
Cooking .....	0.10	0.10	0.11	0.12	0.13	0.13	0.14	1.3%
Clothes Dryers .....	0.25	0.25	0.26	0.27	0.28	0.29	0.30	0.7%
Freezers .....	0.13	0.13	0.13	0.13	0.13	0.14	0.15	0.5%
Lighting .....	0.72	0.73	0.78	0.86	0.86	0.88	0.91	0.9%
Clothes Washers <sup>1</sup> .....	0.03	0.04	0.03	0.03	0.03	0.03	0.03	-1.0%
Dishwashers <sup>1</sup> .....	0.10	0.10	0.09	0.09	0.10	0.10	0.11	0.6%
Color Televisions and Set-Top Boxes .....	0.30	0.32	0.39	0.40	0.43	0.48	0.56	2.3%
Personal Computers .....	0.07	0.07	0.10	0.11	0.12	0.14	0.16	3.7%
Furnace Fans .....	0.08	0.07	0.08	0.09	0.10	0.10	0.11	1.5%
Other Uses <sup>2</sup> .....	0.88	0.90	1.04	1.13	1.23	1.33	1.44	2.0%
<b>Delivered Energy .....</b>	<b>4.64</b>	<b>4.62</b>	<b>4.94</b>	<b>5.26</b>	<b>5.54</b>	<b>5.86</b>	<b>6.23</b>	<b>1.3%</b>
<b>Natural Gas</b>								
Space Heating .....	3.55	3.10	3.57	3.72	3.82	3.86	3.88	0.9%
Space Cooling .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	29.2%
Water Heating .....	1.09	1.08	1.09	1.12	1.16	1.15	1.10	0.1%
Cooking .....	0.22	0.22	0.23	0.24	0.25	0.26	0.27	0.8%
Clothes Dryers .....	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.7%
<b>Delivered Energy .....</b>	<b>4.93</b>	<b>4.47</b>	<b>4.96</b>	<b>5.16</b>	<b>5.31</b>	<b>5.34</b>	<b>5.34</b>	<b>0.7%</b>
<b>Distillate Fuel Oil</b>								
Space Heating .....	0.77	0.76	0.71	0.71	0.68	0.64	0.60	-1.0%
Water Heating .....	0.11	0.10	0.10	0.09	0.08	0.08	0.07	-1.8%
<b>Delivered Energy .....</b>	<b>0.88</b>	<b>0.87</b>	<b>0.81</b>	<b>0.80</b>	<b>0.76</b>	<b>0.71</b>	<b>0.67</b>	<b>-1.1%</b>
<b>Liquefied Petroleum Gases</b>								
Space Heating .....	0.24	0.26	0.22	0.22	0.21	0.21	0.20	-1.1%
Water Heating .....	0.06	0.06	0.05	0.05	0.05	0.04	0.04	-1.3%
Cooking .....	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.3%
Other Uses <sup>3</sup> .....	0.15	0.15	0.16	0.18	0.20	0.22	0.24	1.9%
<b>Delivered Energy .....</b>	<b>0.48</b>	<b>0.51</b>	<b>0.46</b>	<b>0.48</b>	<b>0.49</b>	<b>0.51</b>	<b>0.52</b>	<b>0.1%</b>
Marketed Renewables (wood) <sup>4</sup> .....	0.49	0.47	0.48	0.46	0.45	0.44	0.43	-0.4%
Other Fuels <sup>5</sup> .....	0.10	0.08	0.09	0.09	0.09	0.09	0.08	0.1%



**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	
<b>Delivered Energy Consumption by End Use</b>								
Space Heating .....	5.58	5.08	5.50	5.64	5.72	5.70	5.68	0.5%
Space Cooling .....	0.77	0.72	0.74	0.79	0.86	0.92	0.98	1.3%
Water Heating .....	1.64	1.62	1.62	1.67	1.72	1.70	1.65	0.1%
Refrigeration .....	0.40	0.40	0.38	0.37	0.38	0.39	0.41	0.1%
Cooking .....	0.35	0.35	0.37	0.39	0.41	0.43	0.44	0.9%
Clothes Dryers .....	0.32	0.33	0.33	0.35	0.36	0.37	0.39	0.7%
Freezers .....	0.13	0.13	0.13	0.13	0.13	0.14	0.15	0.5%
Lighting .....	0.72	0.73	0.78	0.86	0.86	0.88	0.91	0.9%
Clothes Washers .....	0.03	0.04	0.03	0.03	0.03	0.03	0.03	-1.0%
Dishwashers .....	0.10	0.10	0.09	0.09	0.10	0.10	0.11	0.6%
Color Televisions and Set-Top Boxes .....	0.30	0.32	0.39	0.40	0.43	0.48	0.56	2.3%
Personal Computers .....	0.07	0.07	0.10	0.11	0.12	0.14	0.16	3.7%
Furnace Fans .....	0.08	0.07	0.08	0.09	0.10	0.10	0.11	1.5%
Other Uses <sup>6</sup> .....	1.03	1.05	1.20	1.31	1.44	1.56	1.68	2.0%
<b>Delivered Energy .....</b>	<b>11.52</b>	<b>11.01</b>	<b>11.74</b>	<b>12.24</b>	<b>12.65</b>	<b>12.94</b>	<b>13.26</b>	<b>0.8%</b>
<b>Electricity Related Losses .....</b>	<b>10.12</b>	<b>10.05</b>	<b>10.60</b>	<b>11.07</b>	<b>11.63</b>	<b>12.22</b>	<b>12.76</b>	<b>1.0%</b>
<b>Total Energy Consumption by End Use</b>								
Space Heating .....	6.52	5.95	6.43	6.59	6.70	6.69	6.67	0.5%
Space Cooling .....	2.44	2.30	2.32	2.46	2.65	2.84	3.00	1.1%
Water Heating .....	2.47	2.44	2.45	2.53	2.62	2.62	2.55	0.2%
Refrigeration .....	1.29	1.27	1.20	1.16	1.18	1.21	1.25	-0.1%
Cooking .....	0.57	0.58	0.60	0.64	0.68	0.71	0.73	1.0%
Clothes Dryers .....	0.88	0.88	0.88	0.91	0.94	0.97	1.01	0.6%
Freezers .....	0.42	0.41	0.40	0.39	0.41	0.43	0.45	0.3%
Lighting .....	2.28	2.31	2.44	2.68	2.66	2.71	2.78	0.8%
Clothes Washers .....	0.11	0.11	0.10	0.09	0.08	0.08	0.09	-1.2%
Dishwashers .....	0.31	0.30	0.29	0.29	0.31	0.32	0.34	0.4%
Color Televisions and Set-Top Boxes .....	0.95	1.03	1.22	1.25	1.33	1.50	1.70	2.1%
Personal Computers .....	0.21	0.21	0.30	0.34	0.38	0.43	0.49	3.6%
Furnace Fans .....	0.24	0.24	0.26	0.28	0.30	0.32	0.33	1.3%
Other Uses <sup>6</sup> .....	2.94	3.01	3.44	3.70	4.03	4.34	4.64	1.8%
<b>Total .....</b>	<b>21.64</b>	<b>21.06</b>	<b>22.34</b>	<b>23.31</b>	<b>24.28</b>	<b>25.17</b>	<b>26.03</b>	<b>0.9%</b>
<b>Nonmarketed Renewables<sup>7</sup></b>								
Geothermal Heat Pumps .....	0.00	0.01	0.01	0.03	0.04	0.06	0.08	12.1%
Solar Hot Water Heating .....	0.02	0.01	0.02	0.02	0.03	0.04	0.04	6.1%
Solar Photovoltaic .....	0.00	0.00	0.00	0.00	0.00	0.00	0.01	16.2%
<b>Total .....</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.05</b>	<b>0.07</b>	<b>0.10</b>	<b>0.13</b>	<b>9.1%</b>

<sup>1</sup>Does not include water heating portion of load.

<sup>2</sup>Includes small electric devices, heating elements, and motors not listed above.

<sup>3</sup>Includes such appliances as outdoor grills and mosquito traps.

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

<sup>5</sup>Includes kerosene and coal.

<sup>6</sup>Includes all other uses listed above.

<sup>7</sup>Represents 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.D112607A.

**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	
<b>Key Indicators</b>								
<b>Total Floorspace (billion square feet)</b>								
Surviving .....	72.1	73.2	77.1	82.1	87.4	93.0	98.8	1.3%
New Additions .....	1.6	1.6	1.6	1.8	1.9	2.0	2.1	1.0%
<b>Total .....</b>	<b>73.8</b>	<b>74.8</b>	<b>78.7</b>	<b>83.8</b>	<b>89.3</b>	<b>94.9</b>	<b>100.9</b>	<b>1.3%</b>
<b>Energy Consumption Intensity (thousand Btu per square foot)</b>								
Delivered Energy Consumption .....	114.8	112.0	111.4	113.3	114.2	114.0	113.7	0.1%
Electricity Related Losses .....	128.8	129.0	129.4	130.8	134.2	135.7	135.1	0.2%
Total Energy Consumption .....	243.6	241.1	240.8	244.1	248.5	249.7	248.8	0.1%
<b>Delivered Energy Consumption by Fuel</b>								
<b>Purchased Electricity</b>								
Space Heating <sup>1</sup> .....	0.14	0.13	0.14	0.14	0.14	0.14	0.15	0.5%
Space Cooling <sup>1</sup> .....	0.52	0.51	0.50	0.52	0.55	0.58	0.61	0.8%
Water Heating <sup>1</sup> .....	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	1.13	1.19	1.25	1.30	1.37	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	0.27	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 <sup>2</sup> .....	1.34	1.40	1.56	1.77	2.01	2.27	2.55	2.5%
<b>Delivered Energy .....</b>	<b>4.35</b>	<b>4.44</b>	<b>4.74</b>	<b>5.21</b>	<b>5.70</b>	<b>6.17</b>	<b>6.65</b>	<b>1.7%</b>
<b>Natural Gas</b>								
Space Heating <sup>1</sup> .....	1.30	1.18	1.30	1.36	1.40	1.41	1.42	0.8%
Space Cooling <sup>1</sup> .....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-0.2%
Water Heating <sup>1</sup> .....	0.56	0.55	0.54	0.60	0.65	0.69	0.73	1.2%
Cooking .....	0.23	0.23	0.25	0.27	0.29	0.31	0.33	1.5%
Other Uses <sup>3</sup> .....	1.06	1.02	1.03	1.12	1.20	1.29	1.40	1.3%
<b>Delivered Energy .....</b>	<b>3.18</b>	<b>3.00</b>	<b>3.14</b>	<b>3.37</b>	<b>3.56</b>	<b>3.72</b>	<b>3.89</b>	<b>1.1%</b>
<b>Distillate Fuel Oil</b>								
Space Heating <sup>1</sup> .....	0.15	0.12	0.14	0.14	0.15	0.15	0.15	0.8%
Water Heating <sup>1</sup> .....	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.2%
Other Uses <sup>4</sup> .....	0.25	0.28	0.24	0.25	0.25	0.25	0.24	-0.6%
<b>Delivered Energy .....</b>	<b>0.45</b>	<b>0.46</b>	<b>0.42</b>	<b>0.44</b>	<b>0.45</b>	<b>0.44</b>	<b>0.44</b>	<b>-0.1%</b>
Marketed Renewables (biomass) .....	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.0%
Other Fuels <sup>5</sup> .....	0.36	0.35	0.34	0.35	0.35	0.36	0.36	0.0%
<b>Delivered Energy Consumption by End Use</b>								
Space Heating <sup>1</sup> .....	1.59	1.44	1.57	1.65	1.69	1.70	1.72	0.7%
Space Cooling <sup>1</sup> .....	0.55	0.53	0.52	0.54	0.57	0.60	0.63	0.8%
Water Heating <sup>1</sup> .....	0.78	0.75	0.74	0.81	0.86	0.90	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	0.34	0.36	1.2%
Lighting .....	1.16	1.15	1.13	1.19	1.25	1.30	1.37	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	0.27	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 <sup>6</sup> .....	3.14	3.18	3.30	3.62	3.95	4.29	4.67	1.6%
<b>Delivered Energy .....</b>	<b>8.47</b>	<b>8.38</b>	<b>8.78</b>	<b>9.50</b>	<b>10.20</b>	<b>10.82</b>	<b>11.48</b>	<b>1.3%</b>

**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	
<b>Electricity Related Losses</b> .....	<b>9.50</b>	<b>9.65</b>	<b>10.19</b>	<b>10.97</b>	<b>11.98</b>	<b>12.89</b>	<b>13.63</b>	<b>1.4%</b>
<b>Total Energy Consumption by End Use</b>								
Space Heating <sup>1</sup> .....	1.90	1.72	1.87	1.94	1.99	2.00	2.02	0.7%
Space Cooling <sup>1</sup> .....	1.69	1.63	1.59	1.64	1.72	1.80	1.89	0.6%
Water Heating <sup>1</sup> .....	1.12	1.10	1.07	1.14	1.20	1.24	1.28	0.6%
Ventilation .....	0.60	0.60	0.60	0.62	0.65	0.68	0.70	0.7%
Cooking .....	0.36	0.35	0.37	0.39	0.41	0.42	0.43	0.8%
Lighting .....	3.70	3.65	3.56	3.68	3.86	4.03	4.17	0.6%
Refrigeration .....	0.73	0.73	0.74	0.75	0.79	0.82	0.86	0.6%
Office Equipment (PC) .....	0.56	0.68	0.80	0.85	0.93	1.02	1.08	1.9%
Office Equipment (non-PC) .....	1.24	1.34	1.73	2.10	2.46	2.68	2.79	3.1%
Other Uses <sup>6</sup> .....	6.06	6.22	6.64	7.35	8.17	9.02	9.89	2.0%
<b>Total</b> .....	<b>17.97</b>	<b>18.03</b>	<b>18.96</b>	<b>20.47</b>	<b>22.18</b>	<b>23.71</b>	<b>25.10</b>	<b>1.4%</b>
<b>Nonmarketed Renewable Fuels<sup>7</sup></b>								
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	8.8%
<b>Total</b> .....	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.04</b>	<b>1.6%</b>

<sup>1</sup>Includes fuel consumption for district services.

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

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

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

<sup>5</sup>Includes residual fuel oil, liquefied petroleum gas, coal, motor gasoline, and kerosene.

<sup>6</sup>Includes 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.

<sup>7</sup>Represents 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.D112607A.

**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	
<b>Key Indicators</b>								
<b>Value of Shipments (billion 2000 dollars)</b>								
Manufacturing .....	4097	4192	4389	4823	5372	5903	6422	1.8%
Nonmanufacturing .....	1525	1531	1494	1606	1672	1731	1804	0.7%
<b>Total .....</b>	<b>5622</b>	<b>5723</b>	<b>5882</b>	<b>6429</b>	<b>7044</b>	<b>7634</b>	<b>8226</b>	<b>1.5%</b>
<b>Energy Prices (2006 dollars per million Btu)</b>								
Liquefied Petroleum Gases .....	16.60	19.72	17.66	16.87	16.85	17.48	17.92	-0.4%
Motor Gasoline .....	15.48	15.48	20.24	18.51	19.05	19.95	20.70	1.2%
Distillate Fuel Oil .....	14.50	16.39	14.66	13.59	14.06	15.14	16.14	-0.1%
Residual Fuel Oil .....	10.44	9.17	9.74	8.41	8.64	9.54	10.48	0.6%
Petrochemical Feedstocks .....	9.01	9.01	8.78	7.67	8.21	8.92	9.78	0.3%
Asphalt and Road Oil .....	5.49	7.22	8.61	7.37	6.16	6.52	7.05	-0.1%
Natural Gas Heat and Power .....	7.41	6.65	6.14	5.31	5.27	5.84	6.39	-0.2%
Natural Gas Feedstocks .....	9.07	8.36	7.82	7.04	6.98	7.54	8.05	-0.2%
Metallurgical Coal .....	3.16	3.39	3.70	3.37	3.36	3.45	3.53	0.2%
Other Industrial Coal .....	2.22	2.34	2.38	2.30	2.29	2.33	2.37	0.1%
Coal for Liquids .....	--	--	--	1.10	1.15	1.19	1.31	--
Electricity .....	17.25	17.97	19.07	17.50	17.30	17.70	17.84	-0.0%
<b>Energy Consumption (quadrillion Btu)<sup>1</sup></b>								
<b>Industrial Consumption Excluding Refining</b>								
Liquefied Petroleum Gases Heat and Power .	0.16	0.15	0.16	0.16	0.15	0.15	0.15	-0.1%
Liquefied Petroleum Gases Feedstocks . . . .	1.95	2.01	1.95	1.87	1.87	1.89	1.83	-0.4%
Motor Gasoline .....	0.37	0.38	0.37	0.38	0.38	0.39	0.40	0.2%
Distillate Fuel Oil .....	1.23	1.28	1.26	1.26	1.26	1.26	1.28	0.0%
Residual Fuel Oil .....	0.27	0.28	0.25	0.23	0.22	0.22	0.21	-1.1%
Petrochemical Feedstocks .....	1.41	1.41	1.36	1.37	1.41	1.44	1.40	-0.0%
Petroleum Coke .....	0.33	0.33	0.29	0.28	0.27	0.27	0.28	-0.7%
Asphalt and Road Oil .....	1.32	1.26	1.14	1.12	1.10	1.13	1.17	-0.3%
Miscellaneous Petroleum <sup>2</sup> .....	0.54	0.58	0.37	0.31	0.29	0.27	0.25	-3.4%
Petroleum Subtotal .....	7.59	7.68	7.15	6.98	6.96	7.02	6.98	-0.4%
Natural Gas Heat and Power .....	5.31	5.11	5.18	5.23	5.36	5.47	5.53	0.3%
Natural Gas Feedstocks .....	0.58	0.54	0.51	0.50	0.48	0.46	0.42	-1.1%
Lease and Plant Fuel <sup>3</sup> .....	1.14	1.17	1.20	1.22	1.25	1.28	1.29	0.4%
Natural Gas Subtotal .....	7.03	6.82	6.89	6.95	7.10	7.21	7.24	0.3%
Metallurgical Coal and Coke <sup>4</sup> .....	0.66	0.66	0.60	0.58	0.60	0.60	0.58	-0.6%
Other Industrial Coal .....	1.22	1.22	1.19	1.15	1.14	1.14	1.14	-0.3%
Coal Subtotal .....	1.88	1.88	1.79	1.73	1.74	1.74	1.72	-0.4%
Renewables <sup>5</sup> .....	1.64	1.65	1.65	1.72	1.82	1.92	2.01	0.8%
Purchased Electricity .....	3.34	3.28	3.28	3.35	3.46	3.52	3.55	0.3%
<b>Delivered Energy .....</b>	<b>21.49</b>	<b>21.31</b>	<b>20.76</b>	<b>20.73</b>	<b>21.08</b>	<b>21.41</b>	<b>21.50</b>	<b>0.0%</b>
Electricity Related Losses .....	7.30	7.13	7.05	7.06	7.27	7.34	7.27	0.1%
<b>Total .....</b>	<b>28.79</b>	<b>28.44</b>	<b>27.81</b>	<b>27.79</b>	<b>28.35</b>	<b>28.76</b>	<b>28.76</b>	<b>0.0%</b>
<b>Refining Consumption</b>								
Liquefied Petroleum Gases Heat and Power .	0.02	0.02	0.03	0.03	0.03	0.02	0.00	--
Distillate Fuel Oil .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Residual Fuel Oil .....	0.01	0.01	0.01	0.04	0.02	0.01	0.01	-0.0%
Petroleum Coke .....	0.56	0.58	0.59	0.67	0.72	0.73	0.77	1.2%
Still Gas .....	1.64	1.68	1.82	1.89	1.95	2.06	2.13	1.0%
Miscellaneous Petroleum <sup>2</sup> .....	0.03	0.03	0.00	0.00	0.00	0.00	0.00	-9.6%
Petroleum Subtotal .....	2.26	2.33	2.46	2.63	2.71	2.82	2.92	0.9%
Natural Gas Heat and Power .....	1.05	1.09	1.45	1.40	1.43	1.47	1.52	1.4%
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	1.09	1.45	1.40	1.43	1.47	1.52	1.4%
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	0.19	0.36	0.70	1.33	--
Coal Subtotal .....	0.06	0.06	0.06	0.25	0.42	0.76	1.39	13.8%
Biofuels Heat and Coproducts .....	0.24	0.30	0.71	0.71	0.73	0.75	0.79	4.1%
Purchased Electricity .....	0.13	0.14	0.16	0.17	0.18	0.19	0.20	1.5%
<b>Delivered Energy .....</b>	<b>3.75</b>	<b>3.92</b>	<b>4.84</b>	<b>5.17</b>	<b>5.48</b>	<b>6.00</b>	<b>6.82</b>	<b>2.3%</b>
Electricity Related Losses .....	0.29	0.30	0.34	0.36	0.38	0.40	0.40	1.2%
<b>Total .....</b>	<b>4.04</b>	<b>4.22</b>	<b>5.18</b>	<b>5.53</b>	<b>5.86</b>	<b>6.41</b>	<b>7.22</b>	<b>2.3%</b>

**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	
<b>Total Industrial Sector Consumption</b>								
Liquefied Petroleum Gases Heat and Power . . . . .	0.17	0.17	0.19	0.19	0.18	0.17	0.15	-0.5%
Liquefied Petroleum Gases Feedstocks . . . . .	1.95	2.01	1.95	1.87	1.87	1.89	1.83	-0.4%
Motor Gasoline . . . . .	0.37	0.38	0.37	0.38	0.38	0.39	0.40	0.2%
Distillate Fuel Oil . . . . .	1.23	1.28	1.26	1.26	1.26	1.26	1.28	-0.0%
Residual Fuel Oil . . . . .	0.28	0.29	0.27	0.27	0.24	0.23	0.23	-1.0%
Petrochemical Feedstocks . . . . .	1.41	1.41	1.36	1.37	1.41	1.44	1.40	-0.0%
Petroleum Coke . . . . .	0.90	0.91	0.88	0.95	0.99	1.00	1.05	0.6%
Asphalt and Road Oil . . . . .	1.32	1.26	1.14	1.12	1.10	1.13	1.17	-0.3%
Still Gas . . . . .	1.64	1.68	1.82	1.89	1.95	2.06	2.13	1.0%
Miscellaneous Petroleum <sup>2</sup> . . . . .	0.57	0.62	0.37	0.31	0.29	0.28	0.25	-3.6%
Petroleum Subtotal . . . . .	9.85	10.01	9.61	9.62	9.67	9.84	9.90	-0.0%
Natural Gas Heat and Power . . . . .	6.36	6.20	6.63	6.64	6.79	6.95	7.06	0.5%
Natural-Gas-to-Liquids Heat and Power . . . . .	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Natural Gas Feedstocks . . . . .	0.58	0.54	0.51	0.50	0.48	0.46	0.42	-1.1%
Lease and Plant Fuel <sup>3</sup> . . . . .	1.14	1.17	1.20	1.22	1.25	1.28	1.29	0.4%
Natural Gas Subtotal . . . . .	8.09	7.91	8.35	8.35	8.53	8.68	8.77	0.4%
Metallurgical Coal and Coke <sup>4</sup> . . . . .	0.66	0.66	0.60	0.58	0.60	0.60	0.58	-0.6%
Other Industrial Coal . . . . .	1.29	1.28	1.25	1.21	1.20	1.20	1.20	-0.3%
Coal-to-Liquids Heat and Power . . . . .	0.00	0.00	0.00	0.19	0.36	0.70	1.33	--
Coal Subtotal . . . . .	1.95	1.95	1.85	1.98	2.16	2.50	3.11	2.0%
Biofuels Heat and Coproducts . . . . .	0.24	0.30	0.71	0.71	0.73	0.75	0.79	4.1%
Renewables <sup>5</sup> . . . . .	1.64	1.65	1.65	1.72	1.82	1.92	2.01	0.8%
Purchased Electricity . . . . .	3.48	3.42	3.44	3.52	3.64	3.71	3.74	0.4%
<b>Delivered Energy</b> . . . . .	<b>25.24</b>	<b>25.23</b>	<b>25.60</b>	<b>25.90</b>	<b>26.55</b>	<b>27.42</b>	<b>28.32</b>	<b>0.5%</b>
Electricity Related Losses . . . . .	7.59	7.43	7.39	7.42	7.65	7.75	7.67	0.1%
<b>Total</b> . . . . .	<b>32.83</b>	<b>32.67</b>	<b>33.00</b>	<b>33.32</b>	<b>34.20</b>	<b>35.16</b>	<b>35.98</b>	<b>0.4%</b>
<b>Energy Consumption per dollar of Shipment (thousand Btu per 2000 dollars)</b>								
Liquefied Petroleum Gases Heat and Power . . . . .	0.03	0.03	0.03	0.03	0.03	0.02	0.02	-2.0%
Liquefied Petroleum Gases Feedstocks . . . . .	0.35	0.35	0.33	0.29	0.27	0.25	0.22	-1.9%
Motor Gasoline . . . . .	0.07	0.07	0.06	0.06	0.05	0.05	0.05	-1.3%
Distillate Fuel Oil . . . . .	0.22	0.22	0.21	0.20	0.18	0.16	0.16	-1.5%
Residual Fuel Oil . . . . .	0.05	0.05	0.05	0.04	0.03	0.03	0.03	-2.5%
Petrochemical Feedstocks . . . . .	0.25	0.25	0.23	0.21	0.20	0.19	0.17	-1.5%
Petroleum Coke . . . . .	0.16	0.16	0.15	0.15	0.14	0.13	0.13	-0.9%
Asphalt and Road Oil . . . . .	0.24	0.22	0.19	0.17	0.16	0.15	0.14	-1.8%
Still Gas . . . . .	0.29	0.29	0.31	0.29	0.28	0.27	0.26	-0.5%
Miscellaneous Petroleum <sup>2</sup> . . . . .	0.10	0.11	0.06	0.05	0.04	0.04	0.03	-5.1%
Petroleum Subtotal . . . . .	1.75	1.75	1.63	1.50	1.37	1.29	1.20	-1.5%
Natural Gas Heat and Power . . . . .	1.13	1.08	1.13	1.03	0.96	0.91	0.86	-1.0%
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	0.09	0.09	0.08	0.07	0.06	0.05	-2.6%
Lease and Plant Fuel <sup>3</sup> . . . . .	0.20	0.20	0.20	0.19	0.18	0.17	0.16	-1.1%
Natural Gas Subtotal . . . . .	1.44	1.38	1.42	1.30	1.21	1.14	1.07	-1.1%
Metallurgical Coal and Coke <sup>4</sup> . . . . .	0.12	0.12	0.10	0.09	0.08	0.08	0.07	-2.1%
Other Industrial Coal . . . . .	0.23	0.22	0.21	0.19	0.17	0.16	0.15	-1.8%
Coal-to-Liquids Heat and Power . . . . .	0.00	0.00	0.00	0.03	0.05	0.09	0.16	--
Coal Subtotal . . . . .	0.35	0.34	0.31	0.31	0.31	0.33	0.38	0.4%
Biofuels Heat and Coproducts . . . . .	0.04	0.05	0.12	0.11	0.10	0.10	0.10	2.5%
Renewables <sup>5</sup> . . . . .	0.29	0.29	0.28	0.27	0.26	0.25	0.24	-0.7%
Purchased Electricity . . . . .	0.62	0.60	0.59	0.55	0.52	0.49	0.45	-1.1%
<b>Delivered Energy</b> . . . . .	<b>4.49</b>	<b>4.41</b>	<b>4.35</b>	<b>4.03</b>	<b>3.77</b>	<b>3.59</b>	<b>3.44</b>	<b>-1.0%</b>
Electricity Related Losses . . . . .	1.35	1.30	1.26	1.15	1.09	1.01	0.93	-1.4%
<b>Total</b> . . . . .	<b>5.84</b>	<b>5.71</b>	<b>5.61</b>	<b>5.18</b>	<b>4.86</b>	<b>4.61</b>	<b>4.37</b>	<b>-1.1%</b>

**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	
<b>Industrial Combined Heat and Power</b>								
Capacity (gigawatts) . . . . .	26.87	25.69	28.04	30.66	33.47	37.57	43.23	2.2%
Generation (billion kilowatthours) . . . . .	142.46	141.64	155.00	174.57	195.32	223.69	267.49	2.7%

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

<sup>2</sup>Includes lubricants and miscellaneous petroleum products.

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

<sup>4</sup>Includes net coal coke imports.

<sup>5</sup>Includes 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.D112607A. 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.D112607A.

**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	
<b>Key Indicators</b>								
<b>Travel Indicators</b>								
(billion vehicle miles traveled)								
Light-Duty Vehicles less than 8,500 pounds	2687	2693	2797	3068	3360	3655	3977	1.6%
Commercial Light Trucks <sup>1</sup>	68	69	72	79	86	94	102	1.6%
Freight Trucks greater than 10,000 pounds	228	234	248	271	303	335	366	1.9%
(billion seat miles available)								
Air	1029	994	1150	1318	1457	1576	1666	2.2%
(billion ton miles traveled)								
Rail	1590	1654	1686	1801	1943	2116	2280	1.3%
Domestic Shipping	607	620	658	683	723	740	757	0.8%
<b>Energy Efficiency Indicators</b>								
(miles per gallon)								
New Light-Duty Vehicle <sup>2</sup>	25.5	25.3	26.5	27.2	28.1	29.2	30.0	0.7%
New Car <sup>2</sup>	30.2	30.1	30.4	31.3	32.5	34.0	35.1	0.6%
New Light Truck <sup>2</sup>	22.4	22.2	23.4	24.4	25.3	26.3	27.1	0.8%
Light-Duty Stock <sup>3</sup>	19.9	20.2	20.0	20.7	21.5	22.3	23.1	0.6%
New Commercial Light Truck <sup>1</sup>	15.0	14.9	15.5	16.1	16.6	17.2	17.7	0.7%
Stock Commercial Light Truck <sup>1</sup>	14.1	14.2	14.7	15.4	16.0	16.5	17.0	0.8%
Freight Truck	6.0	6.0	6.0	6.2	6.4	6.6	6.8	0.5%
(seat miles per gallon)								
Aircraft	60.9	62.2	63.4	65.3	67.3	68.8	70.4	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%
<b>Energy Use by Mode</b>								
<b>(quadrillion Btu)</b>								
Light-Duty Vehicles	16.24	16.42	16.84	17.72	18.74	19.66	20.62	1.0%
Commercial Light Trucks <sup>1</sup>	0.60	0.61	0.61	0.64	0.68	0.72	0.75	0.9%
Bus Transportation	0.26	0.27	0.27	0.27	0.28	0.28	0.29	0.3%
Freight Trucks	4.73	4.88	5.15	5.48	5.88	6.31	6.75	1.4%
Rail, Passenger	0.04	0.04	0.05	0.05	0.05	0.05	0.06	1.2%
Rail, Freight	0.55	0.57	0.58	0.61	0.66	0.71	0.76	1.2%
Shipping, Domestic	0.31	0.32	0.33	0.34	0.36	0.37	0.38	0.7%
Shipping, International	0.77	0.78	0.79	0.79	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	2.94	3.29	3.62	3.93	4.22	2.0%
Military Use	0.68	0.69	0.72	0.71	0.73	0.75	0.78	0.5%
Lubricants	0.15	0.15	0.14	0.14	0.15	0.15	0.15	0.1%
Pipeline Fuel	0.60	0.59	0.63	0.65	0.69	0.72	0.73	0.9%
<b>Total</b>	<b>27.90</b>	<b>28.20</b>	<b>29.29</b>	<b>30.96</b>	<b>32.90</b>	<b>34.75</b>	<b>36.58</b>	<b>1.1%</b>

**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	
<b>Energy Use by Mode (million barrels per day oil equivalent)</b>								
Light-Duty Vehicles .....	8.52	8.61	9.11	9.59	10.14	10.63	11.15	1.1%
Commercial Light Trucks <sup>1</sup> .....	0.32	0.32	0.33	0.35	0.37	0.39	0.41	1.0%
Bus Transportation .....	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.3%
Freight Trucks .....	2.25	2.33	2.46	2.63	2.82	3.03	3.24	1.4%
Rail, Passenger .....	0.02	0.02	0.02	0.02	0.02	0.03	0.03	1.2%
Rail, Freight .....	0.26	0.27	0.27	0.29	0.31	0.34	0.36	1.3%
Shipping, Domestic .....	0.14	0.15	0.15	0.16	0.17	0.17	0.17	0.7%
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	0.17	1.1%
Air .....	1.32	1.28	1.42	1.59	1.75	1.90	2.04	2.0%
Military Use .....	0.33	0.33	0.34	0.34	0.35	0.36	0.37	0.5%
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	0.37	0.9%
<b>Total .....</b>	<b>14.11</b>	<b>14.27</b>	<b>15.13</b>	<b>15.99</b>	<b>16.98</b>	<b>17.92</b>	<b>18.86</b>	<b>1.2%</b>

<sup>1</sup>Commercial trucks 8,500 to 10,000 pounds.

<sup>2</sup>Environmental Protection Agency rated miles per gallon.

<sup>3</sup>Combined 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.D112607A.



**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	
<b>Generation by Fuel Type</b>								
<b>Electric Power Sector<sup>1</sup></b>								
<b>Power Only<sup>2</sup></b>								
Coal .....	1956	1930	2002	2122	2323	2596	2889	1.7%
Petroleum .....	111	55	50	48	51	54	54	-0.0%
Natural Gas <sup>3</sup> .....	554	608	683	726	680	586	523	-0.6%
Nuclear Power .....	782	787	797	807	878	928	949	0.8%
Pumped Storage/Other <sup>4</sup> .....	1	0	1	1	1	1	1	5.4%
Renewable Sources <sup>5</sup> .....	319	347	420	471	525	557	576	2.1%
Distributed Generation (Natural Gas) .....	0	0	0	0	1	2	4	--
<b>Total .....</b>	<b>3722</b>	<b>3727</b>	<b>3953</b>	<b>4175</b>	<b>4458</b>	<b>4723</b>	<b>4995</b>	<b>1.2%</b>
<b>Combined Heat and Power<sup>6</sup></b>								
Coal .....	37	36	32	32	31	31	29	-0.9%
Petroleum .....	6	4	1	1	1	1	1	-6.7%
Natural Gas .....	130	124	124	131	115	108	95	-1.1%
Renewable Sources .....	4	4	4	4	5	6	6	1.1%
<b>Total .....</b>	<b>180</b>	<b>173</b>	<b>160</b>	<b>167</b>	<b>152</b>	<b>145</b>	<b>130</b>	<b>-1.2%</b>
<b>Total Net Generation .....</b>	<b>3902</b>	<b>3900</b>	<b>4113</b>	<b>4342</b>	<b>4610</b>	<b>4868</b>	<b>5125</b>	<b>1.1%</b>
Less Direct Use .....	33	33	34	34	34	34	34	0.1%
<b>Net Available to the Grid .....</b>	<b>3869</b>	<b>3866</b>	<b>4079</b>	<b>4308</b>	<b>4576</b>	<b>4834</b>	<b>5091</b>	<b>1.2%</b>
<b>End-Use Generation<sup>7</sup></b>								
Coal .....	22	22	21	31	40	57	88	6.0%
Petroleum .....	6	4	6	6	6	7	9	3.5%
Natural Gas .....	75	75	88	97	108	121	135	2.5%
Other Gaseous Fuels <sup>8</sup> .....	5	5	4	4	4	4	4	-1.1%
Renewable Sources <sup>9</sup> .....	34	34	37	39	42	46	50	1.6%
Other <sup>10</sup> .....	14	13	12	12	12	12	12	-0.4%
<b>Total .....</b>	<b>155</b>	<b>154</b>	<b>168</b>	<b>189</b>	<b>213</b>	<b>246</b>	<b>299</b>	<b>2.8%</b>
Less Direct Use .....	126	125	134	149	168	194	234	2.7%
<b>Total Sales to the Grid .....</b>	<b>29</b>	<b>29</b>	<b>34</b>	<b>39</b>	<b>45</b>	<b>52</b>	<b>65</b>	<b>3.4%</b>
<b>Total Electricity Generation .....</b>	<b>4057</b>	<b>4053</b>	<b>4281</b>	<b>4531</b>	<b>4823</b>	<b>5114</b>	<b>5424</b>	<b>1.2%</b>
<b>Total Net Generation to the Grid .....</b>	<b>3898</b>	<b>3896</b>	<b>4113</b>	<b>4348</b>	<b>4621</b>	<b>4886</b>	<b>5156</b>	<b>1.2%</b>
<b>Net Imports .....</b>	<b>25</b>	<b>18</b>	<b>16</b>	<b>11</b>	<b>14</b>	<b>16</b>	<b>21</b>	<b>0.7%</b>
<b>Electricity Sales by Sector</b>								
Residential .....	1359	1354	1447	1541	1623	1716	1826	1.3%
Commercial .....	1275	1301	1390	1526	1672	1809	1950	1.7%
Industrial .....	1019	1002	1009	1033	1067	1088	1097	0.4%
Transportation .....	6	6	7	7	8	8	9	1.4%
<b>Total .....</b>	<b>3660</b>	<b>3663</b>	<b>3853</b>	<b>4108</b>	<b>4370</b>	<b>4621</b>	<b>4881</b>	<b>1.2%</b>
Direct Use .....	158	158	168	183	202	228	268	2.2%
<b>Total Electricity Use .....</b>	<b>3818</b>	<b>3821</b>	<b>4021</b>	<b>4291</b>	<b>4571</b>	<b>4849</b>	<b>5149</b>	<b>1.3%</b>
<b>End-Use Prices</b>								
<b>(2006 cents per kilowatthour)</b>								
Residential .....	9.7	10.4	10.6	10.1	10.1	10.3	10.3	-0.0%
Commercial .....	8.9	9.5	9.4	8.8	8.8	9.0	9.0	-0.2%
Industrial .....	5.9	6.1	6.5	6.0	5.9	6.0	6.1	-0.0%
Transportation .....	10.5	10.1	10.7	10.3	10.2	10.3	10.4	0.1%
<b>All Sectors Average .....</b>	<b>8.4</b>	<b>8.9</b>	<b>9.1</b>	<b>8.6</b>	<b>8.6</b>	<b>8.8</b>	<b>8.8</b>	<b>-0.0%</b>
<b>Prices by Service Category</b>								
<b>(2006 cents per kilowatthour)</b>								
Generation .....	5.4	5.9	6.1	5.6	5.6	5.8	5.9	-0.0%
Transmission .....	0.6	0.6	0.7	0.8	0.8	0.8	0.8	1.0%
Distribution .....	2.3	2.3	2.3	2.3	2.2	2.2	2.1	-0.3%

**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	
<b>Electric Power Sector Emissions<sup>1</sup></b>								
Sulfur Dioxide (million tons) .....	10.22	9.39	6.28	4.60	3.85	3.71	3.50	-4.0%
Nitrogen Oxide (million tons) .....	3.64	3.41	2.33	2.11	2.11	2.13	2.15	-1.9%
Mercury (tons) .....	52.09	50.20	37.23	24.20	18.93	16.45	14.41	-5.1%

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

<sup>2</sup>Includes plants that only produce electricity.

<sup>3</sup>Includes electricity generation from fuel cells.

<sup>4</sup>Includes 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).

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

<sup>6</sup>Includes 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).

<sup>7</sup>Includes 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.

<sup>8</sup>Includes refinery gas and still gas.

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

<sup>10</sup>Includes 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.D112607A. Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D112607A.

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

Net Summer Capacity <sup>1</sup>	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
<b>Electric Power Sector<sup>2</sup></b>								
<b>Power Only<sup>3</sup></b>								
Coal .....	305.1	305.2	311.4	320.2	342.8	380.1	422.3	1.4%
Oil and Natural Gas Steam <sup>4</sup> .....	120.8	119.3	118.0	87.8	87.8	87.1	86.9	-1.3%
Combined Cycle .....	137.4	144.7	158.2	159.7	163.4	171.4	178.6	0.9%
Combustion Turbine/Diesel .....	127.4	128.1	135.8	129.0	129.8	134.9	144.3	0.5%
Nuclear Power <sup>5</sup> .....	100.2	100.2	100.9	102.1	112.1	117.9	118.8	0.7%
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 <sup>6</sup> .....	92.8	95.7	110.8	116.6	124.2	130.6	135.1	1.4%
Distributed Generation <sup>7</sup> .....	0.0	0.0	0.2	0.6	2.0	4.3	7.3	--
<b>Total .....</b>	<b>905.2</b>	<b>914.7</b>	<b>956.7</b>	<b>937.3</b>	<b>983.5</b>	<b>1047.7</b>	<b>1114.6</b>	<b>0.8%</b>
<b>Combined Heat and Power<sup>8</sup></b>								
Coal .....	4.6	4.6	4.6	4.6	4.6	4.6	4.6	0.0%
Oil and Natural Gas Steam <sup>4</sup> .....	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 <sup>6</sup> .....	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.2%
<b>Total .....</b>	<b>40.4</b>	<b>40.3</b>	<b>40.3</b>	<b>41.0</b>	<b>41.0</b>	<b>41.0</b>	<b>41.0</b>	<b>0.1%</b>
<b>Cumulative Planned Additions<sup>9</sup></b>								
Coal .....	0.0	0.0	7.7	10.7	10.7	10.7	10.7	--
Oil and Natural Gas Steam <sup>4</sup> .....	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 <sup>6</sup> .....	0.0	0.0	9.5	9.5	9.6	9.8	9.9	--
Distributed Generation <sup>7</sup> .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
<b>Total .....</b>	<b>0.0</b>	<b>0.0</b>	<b>34.5</b>	<b>39.6</b>	<b>39.7</b>	<b>39.9</b>	<b>40.0</b>	<b>--</b>
<b>Cumulative Unplanned Additions<sup>9</sup></b>								
Coal .....	0.0	0.0	0.0	7.7	30.6	68.0	110.2	--
Oil and Natural Gas Steam <sup>4</sup> .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
Combined Cycle .....	0.0	0.0	0.0	0.1	3.8	11.8	19.0	--
Combustion Turbine/Diesel .....	0.0	0.0	4.6	6.1	6.9	12.0	22.5	--
Nuclear Power .....	0.0	0.0	0.0	0.0	9.2	15.0	20.4	--
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 <sup>6</sup> .....	0.0	0.0	5.7	11.4	18.9	25.2	29.6	--
Distributed Generation <sup>7</sup> .....	0.0	0.0	0.2	0.6	2.0	4.3	7.3	--
<b>Total .....</b>	<b>0.0</b>	<b>0.0</b>	<b>10.5</b>	<b>25.8</b>	<b>71.5</b>	<b>136.3</b>	<b>209.0</b>	<b>--</b>
<b>Cumulative Electric Power Sector Additions</b>	<b>0.0</b>	<b>0.0</b>	<b>45.1</b>	<b>65.5</b>	<b>111.2</b>	<b>176.2</b>	<b>248.9</b>	<b>--</b>
<b>Cumulative Retirements<sup>10</sup></b>								
Coal .....	0.0	0.0	1.5	3.4	3.7	3.8	3.9	--
Oil and Natural Gas Steam <sup>4</sup> .....	0.0	0.0	1.4	31.6	31.6	32.3	32.5	--
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	9.0	9.0	9.0	10.1	--
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 <sup>6</sup> .....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--
<b>Total .....</b>	<b>0.0</b>	<b>0.0</b>	<b>3.6</b>	<b>44.0</b>	<b>44.3</b>	<b>45.2</b>	<b>50.9</b>	<b>--</b>
<b>Total Electric Power Sector Capacity .....</b>	<b>945.6</b>	<b>955.0</b>	<b>997.1</b>	<b>978.3</b>	<b>1024.5</b>	<b>1088.7</b>	<b>1155.7</b>	<b>0.8%</b>

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

Net Summer Capacity <sup>1</sup>	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
<b>End-Use Generators<sup>11</sup></b>								
Coal .....	4.1	4.0	4.0	5.2	6.4	8.7	12.9	5.0%
Petroleum .....	1.2	1.2	1.7	1.7	1.7	2.0	2.1	2.2%
Natural Gas .....	14.7	14.1	15.8	17.0	18.4	20.2	22.1	1.9%
Other Gaseous Fuels .....	2.2	1.8	1.7	1.7	1.7	1.7	1.7	-0.1%
Renewable Sources <sup>6</sup> .....	6.0	6.0	6.6	7.0	7.9	9.1	10.4	2.3%
Other .....	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.0%
<b>Total .....</b>	<b>29.0</b>	<b>27.9</b>	<b>30.7</b>	<b>33.5</b>	<b>37.0</b>	<b>42.5</b>	<b>50.1</b>	<b>2.5%</b>
<b>Cumulative Capacity Additions<sup>9</sup></b>	<b>0.0</b>	<b>0.0</b>	<b>2.8</b>	<b>5.6</b>	<b>9.2</b>	<b>14.6</b>	<b>22.2</b>	<b>--</b>

<sup>1</sup>Net 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.

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

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

<sup>4</sup>Includes oil-, gas-, and dual-fired capacity.

<sup>5</sup>Nuclear capacity includes 2.7 gigawatts of uprates through 2030.

<sup>6</sup>Includes 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.

<sup>7</sup>Primarily peak load capacity fueled by natural gas.

<sup>8</sup>Includes 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).

<sup>9</sup>Cumulative additions after December 31, 2006.

<sup>10</sup>Cumulative retirements after December 31, 2006.

<sup>11</sup>Includes 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.D112607A.

**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	
<b>Interregional Electricity Trade</b>								
Gross Domestic Sales								
Firm Power .....	127.0	119.4	105.5	82.4	50.6	37.9	37.9	-4.7%
Economy .....	177.3	168.9	225.6	253.3	201.0	196.6	157.9	-0.3%
<b>Total .....</b>	<b>304.3</b>	<b>288.3</b>	<b>331.1</b>	<b>335.7</b>	<b>251.6</b>	<b>234.5</b>	<b>195.8</b>	<b>-1.6%</b>
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 .....	12272.6	9873.2	13066.8	12947.6	9890.3	9844.4	8057.0	-0.8%
<b>Total .....</b>	<b>19350.0</b>	<b>16529.1</b>	<b>18944.0</b>	<b>17540.1</b>	<b>12710.3</b>	<b>11955.4</b>	<b>10168.0</b>	<b>-2.0%</b>
<b>International Electricity Trade</b>								
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	30.4	24.7	27.6	27.6	32.6	0.5%
<b>Total .....</b>	<b>44.5</b>	<b>42.4</b>	<b>32.9</b>	<b>26.6</b>	<b>28.4</b>	<b>27.9</b>	<b>33.0</b>	<b>-1.0%</b>
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%
<b>Total .....</b>	<b>19.8</b>	<b>24.6</b>	<b>16.5</b>	<b>15.6</b>	<b>14.2</b>	<b>12.1</b>	<b>12.1</b>	<b>-2.9%</b>

-- = 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.D112607A.

**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	
<b>Crude Oil</b>								
Domestic Crude Production <sup>1</sup> .....	5.19	5.10	5.91	6.06	6.39	5.99	5.63	0.4%
Alaska .....	0.86	0.74	0.69	0.57	0.78	0.49	0.28	-4.0%
Lower 48 States .....	4.33	4.36	5.22	5.50	5.61	5.50	5.35	0.9%
Net Imports .....	10.09	10.09	9.64	10.13	10.15	10.96	11.83	0.7%
Gross Imports .....	10.13	10.12	9.67	10.16	10.18	10.99	11.85	0.7%
Exports .....	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.4%
Other Crude Supply <sup>2</sup> .....	-0.05	0.05	0.00	0.00	0.00	0.00	0.00	--
<b>Total Crude Supply .....</b>	<b>15.23</b>	<b>15.24</b>	<b>15.55</b>	<b>16.19</b>	<b>16.55</b>	<b>16.95</b>	<b>17.46</b>	<b>0.6%</b>
<b>Other Supply</b>								
Natural Gas Plant Liquids .....	1.72	1.74	1.64	1.65	1.68	1.66	1.61	-0.3%
Net Product Imports .....	2.48	2.36	2.00	2.08	2.54	2.86	2.98	1.0%
Gross Refined Product Imports <sup>3</sup> .....	2.45	2.17	1.79	1.75	2.03	2.16	2.09	-0.2%
Unfinished Oil Imports .....	0.58	0.69	0.67	0.69	0.73	0.78	0.83	0.8%
Net Ethanol Imports .....	0.01	0.05	0.04	0.11	0.14	0.17	0.22	6.8%
Blending Component Imports .....	0.54	0.68	0.78	0.84	0.96	1.09	1.15	2.2%
Exports .....	1.07	1.22	1.28	1.31	1.32	1.34	1.36	0.5%
Refinery Processing Gain <sup>4</sup> .....	0.99	0.99	1.08	1.06	1.10	1.11	1.14	0.6%
Other Inputs .....	0.40	0.36	0.98	1.10	1.23	1.50	1.84	7.0%
Ethanol .....	0.25	0.32	0.79	0.79	0.81	0.84	0.89	4.3%
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	0.08	0.16	0.31	0.58	--
Other <sup>5</sup> .....	0.14	0.04	0.19	0.23	0.26	0.35	0.37	9.3%
<b>Total Primary Supply<sup>6</sup> .....</b>	<b>20.81</b>	<b>20.70</b>	<b>21.24</b>	<b>22.08</b>	<b>23.10</b>	<b>24.07</b>	<b>25.03</b>	<b>0.8%</b>
<b>Liquid Fuels Consumption</b>								
<b>by Fuel</b>								
Liquefied Petroleum Gases .....	2.03	2.05	2.06	2.01	2.02	2.03	1.99	-0.1%
E85 <sup>7</sup> .....	0.00	0.00	0.00	0.00	0.00	0.01	0.01	11.1%
Motor Gasoline <sup>8</sup> .....	9.16	9.25	9.75	10.20	10.72	11.17	11.61	1.0%
Jet Fuel <sup>9</sup> .....	1.68	1.63	1.68	1.84	2.01	2.17	2.32	1.5%
Distillate Fuel Oil <sup>10</sup> .....	4.12	4.17	4.43	4.66	4.92	5.21	5.54	1.2%
Residual Fuel Oil .....	0.92	0.69	0.70	0.69	0.69	0.69	0.70	0.0%
Other <sup>11</sup> .....	2.89	2.86	2.57	2.60	2.64	2.72	2.76	-0.1%
<b>by Sector</b>								
Residential and Commercial .....	1.19	1.19	1.12	1.14	1.14	1.13	1.11	-0.3%
Industrial <sup>12</sup> .....	5.13	5.22	5.03	5.01	5.04	5.12	5.11	-0.1%
Transportation .....	13.91	14.05	14.77	15.62	16.58	17.50	18.43	1.1%
Electric Power <sup>13</sup> .....	0.55	0.29	0.26	0.24	0.26	0.27	0.27	-0.2%
<b>Total .....</b>	<b>20.80</b>	<b>20.65</b>	<b>21.18</b>	<b>22.01</b>	<b>23.01</b>	<b>24.01</b>	<b>24.93</b>	<b>0.8%</b>
<b>Discrepancy<sup>14</sup> .....</b>	<b>0.01</b>	<b>0.04</b>	<b>0.06</b>	<b>0.07</b>	<b>0.09</b>	<b>0.06</b>	<b>0.10</b>	<b>--</b>

**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 <sup>15</sup> . . . . .	17.1	17.3	17.4	17.4	17.6	18.0	18.6	0.3%
Capacity Utilization Rate (percent) <sup>16</sup> . . . . .	91.0	90.0	90.4	94.1	95.3	95.3	95.3	0.2%
Net Import Share of Product Supplied (percent) . .	60.4	60.2	54.8	55.3	55.0	57.4	59.2	-0.1%
Net Expenditures for Imported Crude Oil and Petroleum Products (billion 2006 dollars) . . . . .	268.23	264.86	235.79	218.28	233.65	274.93	316.77	0.7%

<sup>1</sup>Includes lease condensate.  
<sup>2</sup>Strategic petroleum reserve stock additions plus unaccounted for crude oil and crude stock withdrawals minus crude product supplied.  
<sup>3</sup>Includes other hydrocarbons and alcohols.  
<sup>4</sup>The 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.  
<sup>5</sup>Includes petroleum product stock withdrawals, domestic sources of blending components, other hydrocarbons, ethers, and renewable fuels such as biodiesel.  
<sup>6</sup>Total crude supply plus natural gas plant liquids, other inputs, refinery processing gain, and net product imports.  
<sup>7</sup>E85 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.  
<sup>8</sup>Includes ethanol and ethers blended into gasoline.  
<sup>9</sup>Includes only kerosene type.  
<sup>10</sup>Includes distillate fuel oil and kerosene from petroleum and biomass feedstocks.  
<sup>11</sup>Includes 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.  
<sup>12</sup>Includes consumption for combined heat and power, which produces electricity and other useful thermal energy.  
<sup>13</sup>Includes 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.  
<sup>14</sup>Balancing item. Includes unaccounted for supply, losses, and gains.  
<sup>15</sup>End-of-year operable capacity.  
<sup>16</sup>Rate 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.D112607A.

**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	
<b>Crude Oil Prices (2006 dollars per barrel)</b>								
Imported Low Sulfur Light Crude Oil <sup>1</sup> . . . . .	58.28	66.02	66.89	59.70	61.05	66.11	71.87	0.4%
Imported Crude Oil <sup>1</sup> . . . . .	50.40	59.05	58.93	52.03	52.80	57.11	62.07	0.2%
<b>Delivered Sector Product Prices</b>								
<b>Residential</b>								
Liquefied Petroleum Gases . . . . .	162.3	187.7	215.8	209.1	208.7	213.9	218.7	0.6%
Distillate Fuel Oil . . . . .	235.6	248.8	223.2	200.0	206.9	221.4	235.4	-0.2%
<b>Commercial</b>								
Distillate Fuel Oil . . . . .	191.2	215.7	195.3	175.4	182.2	196.8	211.1	-0.1%
Residual Fuel Oil . . . . .	167.8	130.4	135.4	119.1	122.2	133.4	145.9	0.5%
Residual Fuel Oil (2006 dollars per barrel) . .	70.46	54.76	56.87	50.04	51.31	56.01	61.30	0.5%
<b>Industrial<sup>2</sup></b>								
Liquefied Petroleum Gases . . . . .	143.0	169.3	151.6	144.8	144.6	150.0	153.8	-0.4%
Distillate Fuel Oil . . . . .	200.8	226.8	201.6	186.5	193.0	207.9	221.6	-0.1%
Residual Fuel Oil . . . . .	156.2	137.3	145.8	125.8	129.3	142.7	156.8	0.6%
Residual Fuel Oil (2006 dollars per barrel) . .	65.62	57.65	61.22	52.85	54.32	59.95	65.86	0.6%
<b>Transportation</b>								
Liquefied Petroleum Gases . . . . .	176.6	187.4	222.5	215.5	214.5	219.1	223.5	0.7%
Ethanol (E85) <sup>3</sup> . . . . .	226.6	235.4	258.7	224.8	222.3	225.0	228.9	-0.1%
Ethanol Wholesale Price . . . . .	196.8	250.0	194.9	158.6	160.4	161.9	164.7	-1.7%
Motor Gasoline <sup>4</sup> . . . . .	239.5	263.3	244.2	223.4	229.8	240.5	249.2	-0.2%
Jet Fuel <sup>5</sup> . . . . .	179.6	200.1	198.7	178.5	186.6	201.6	215.6	0.3%
Diesel Fuel (distillate fuel oil) <sup>6</sup> . . . . .	249.1	271.0	254.2	235.2	239.8	253.1	265.6	-0.1%
Residual Fuel Oil . . . . .	129.9	119.6	143.4	131.1	134.7	148.6	164.9	1.3%
Residual Fuel Oil (2006 dollars per barrel) . .	54.56	50.23	60.22	55.05	56.56	62.40	69.28	1.3%
<b>Electric Power<sup>7</sup></b>								
Distillate Fuel Oil . . . . .	175.1	197.9	174.0	150.8	157.1	171.6	185.2	-0.3%
Residual Fuel Oil . . . . .	110.8	119.4	126.4	113.0	116.4	129.8	145.3	0.8%
Residual Fuel Oil (2006 dollars per barrel) . .	46.52	50.14	53.10	47.47	48.91	54.50	61.02	0.8%
<b>Refined Petroleum Product Prices<sup>8</sup></b>								
Liquefied Petroleum Gases . . . . .	146.5	172.9	164.4	158.2	158.4	164.0	168.7	-0.1%
Motor Gasoline <sup>4</sup> . . . . .	238.4	261.6	244.2	223.3	229.7	240.5	249.2	-0.2%
Jet Fuel <sup>5</sup> . . . . .	179.6	200.1	198.7	178.5	186.6	201.6	215.6	0.3%
Distillate Fuel Oil . . . . .	236.4	258.6	239.1	221.8	227.5	241.9	255.4	-0.1%
Residual Fuel Oil . . . . .	126.4	123.3	139.1	125.2	128.7	142.2	157.7	1.0%
Residual Fuel Oil (2006 dollars per barrel) . .	53.08	51.78	58.44	52.58	54.04	59.71	66.25	1.0%
<b>Average</b> . . . . .	<b>212.2</b>	<b>234.7</b>	<b>222.2</b>	<b>204.7</b>	<b>210.8</b>	<b>222.7</b>	<b>233.8</b>	<b>-0.0%</b>

<sup>1</sup>Weighted average price delivered to U.S. refiners.

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

<sup>3</sup>E85 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.

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

<sup>5</sup>Includes only kerosene type.

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

<sup>7</sup>Includes 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.

<sup>8</sup>Weighted 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.D112607A.



**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	
<b>Production</b>								
Dry Gas Production <sup>1</sup> .....	18.07	18.51	19.06	19.35	19.70	19.67	19.84	0.3%
Supplemental Natural Gas <sup>2</sup> .....	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.1%
<b>Net Imports</b> .....								
Pipeline <sup>3</sup> .....	3.61	3.46	4.01	4.52	4.28	3.89	3.41	-0.1%
Liquefied Natural Gas .....	0.57	0.52	1.38	2.51	2.88	2.98	2.90	7.4%
<b>Total Supply</b> .....								
	21.75	22.03	23.14	23.94	24.04	23.63	23.31	0.2%
<b>Consumption by Sector</b>								
Residential .....	4.79	4.34	4.82	5.01	5.16	5.19	5.18	0.7%
Commercial .....	3.09	2.92	3.05	3.27	3.46	3.61	3.78	1.1%
Industrial <sup>4</sup> .....	6.75	6.55	6.93	6.93	7.06	7.19	7.26	0.4%
Natural-Gas-to-Liquids Heat and Power <sup>5</sup> .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Natural Gas to Liquids Production <sup>6</sup> .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
Electric Power <sup>7</sup> .....	5.87	6.24	6.60	6.94	6.48	5.69	5.11	-0.8%
Transportation <sup>8</sup> .....	0.01	0.02	0.03	0.05	0.07	0.08	0.09	6.7%
Pipeline Fuel .....	0.58	0.58	0.61	0.63	0.67	0.70	0.71	0.9%
Lease and Plant Fuel <sup>9</sup> .....	1.11	1.14	1.17	1.18	1.22	1.24	1.26	0.4%
<b>Total</b> .....	<b>22.21</b>	<b>21.78</b>	<b>23.22</b>	<b>24.02</b>	<b>24.12</b>	<b>23.70</b>	<b>23.39</b>	<b>0.3%</b>
<b>Discrepancy</b> <sup>10</sup> .....								
	-0.46	0.26	-0.08	-0.08	-0.08	-0.08	-0.08	--
<b>Natural Gas Prices</b>								
<b>(2006 dollars per million Btu)</b>								
Henry Hub Spot Price .....	8.93	6.73	6.64	5.93	5.93	6.59	7.19	0.3%
Average Lower 48 Wellhead Price <sup>11</sup> .....	7.62	6.24	5.92	5.27	5.27	5.87	6.42	0.1%
<b>(2006 dollars per thousand cubic feet)</b>								
Average Lower 48 Wellhead Price <sup>11</sup> .....	7.85	6.42	6.09	5.43	5.42	6.04	6.60	0.1%
<b>Delivered Prices</b>								
Residential .....	13.22	13.80	12.45	11.75	11.82	12.57	13.31	-0.1%
Commercial .....	11.91	11.84	10.80	10.14	10.26	11.04	11.79	-0.0%
Industrial <sup>4</sup> .....	8.62	7.87	7.27	6.46	6.41	6.98	7.51	-0.2%
Electric Power <sup>7</sup> .....	8.67	7.07	6.95	6.20	6.10	6.60	7.10	0.0%
Transportation <sup>12</sup> .....	14.96	14.68	13.88	12.87	12.58	12.92	13.27	-0.4%
<b>Average</b> <sup>13</sup> .....	<b>10.21</b>	<b>9.48</b>	<b>8.85</b>	<b>8.13</b>	<b>8.19</b>	<b>8.91</b>	<b>9.59</b>	<b>0.0%</b>

<sup>1</sup>Marketed production (wet) minus extraction losses.

<sup>2</sup>Synthetic 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.

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

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

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

<sup>6</sup>Includes any natural gas that is converted into liquid fuel.

<sup>7</sup>Includes 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.

<sup>8</sup>Compressed natural gas used as vehicle fuel.

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

<sup>10</sup>Balancing 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. In addition, 2005 and 2006 values include net storage injections.

<sup>11</sup>Represents lower 48 onshore and offshore supplies.

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

<sup>13</sup>Weighted 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; and lease, plant, and pipeline fuel consumption: Energy Information Administration (EIA), *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2006 supply values; and lease, plant, and pipeline fuel consumption; and wellhead price: 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 residential and commercial delivered prices: EIA, *Natural Gas Annual 2005*, DOE/EIA-0131(2005) (Washington, DC, November 2006). 2006 residential and commercial delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). 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.D112607A.

**Table A14. Oil and Gas Supply**

Production and Supply	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
<b>Crude Oil</b>								
<b>Lower 48 Average Wellhead Price<sup>1</sup></b> (2006 dollars per barrel) .....	<b>52.37</b>	<b>60.18</b>	<b>69.63</b>	<b>58.79</b>	<b>54.93</b>	<b>59.14</b>	<b>63.58</b>	<b>0.2%</b>
<b>Production (million barrels per day)<sup>2</sup></b>								
United States Total .....	5.19	5.10	5.91	6.06	6.39	5.99	5.63	0.4%
Lower 48 Onshore .....	2.91	2.93	3.04	3.16	3.26	3.45	3.40	0.6%
Lower 48 Offshore .....	1.41	1.43	2.18	2.34	2.35	2.05	1.95	1.3%
Alaska .....	0.86	0.74	0.69	0.57	0.78	0.49	0.28	-4.0%
<b>Lower 48 End of Year Reserves<sup>2</sup></b> (billion barrels) .....	<b>18.85</b>	<b>19.06</b>	<b>19.77</b>	<b>20.62</b>	<b>20.98</b>	<b>20.71</b>	<b>20.08</b>	<b>0.2%</b>
<b>Natural Gas</b>								
<b>Prices (2006 dollars per million Btu)</b>								
Henry Hub Spot Price .....	8.93	6.73	6.64	5.93	5.93	6.59	7.19	0.3%
Average Lower 48 Wellhead Price <sup>1</sup> .....	7.62	6.24	5.92	5.27	5.27	5.87	6.42	0.1%
<b>Prices (2006 dollars per thousand cubic feet)</b>								
Average Lower 48 Wellhead Price <sup>1</sup> .....	7.85	6.42	6.09	5.43	5.42	6.04	6.60	0.1%
<b>Dry Production (trillion cubic feet)<sup>3</sup></b>								
United States Total .....	18.07	18.51	19.06	19.35	19.71	19.67	19.84	0.3%
Lower 48 Onshore .....	14.24	15.04	15.09	14.71	14.05	13.87	13.98	-0.3%
Associated-Dissolved <sup>4</sup> .....	1.35	1.42	1.41	1.38	1.33	1.29	1.20	-0.7%
Non-Associated .....	12.90	13.62	13.68	13.33	12.73	12.58	12.77	-0.3%
Conventional .....	5.00	5.14	4.77	4.01	3.45	3.24	3.26	-1.9%
Unconventional .....	7.89	8.48	8.91	9.32	9.27	9.34	9.51	0.5%
Lower 48 Offshore .....	3.37	3.05	3.60	4.26	4.46	3.79	3.49	0.6%
Associated-Dissolved <sup>4</sup> .....	0.68	0.62	0.77	0.93	0.99	0.84	0.78	1.0%
Non-Associated .....	2.69	2.43	2.83	3.33	3.47	2.95	2.71	0.4%
Alaska .....	0.46	0.42	0.37	0.38	1.20	2.01	2.37	7.5%
<b>Lower 48 End of Year Dry Reserves</b> (trillion cubic feet) .....	<b>196.22</b>	<b>203.36</b>	<b>217.24</b>	<b>223.45</b>	<b>219.07</b>	<b>207.67</b>	<b>202.74</b>	<b>-0.0%</b>
<b>Supplemental Gas Supplies (trillion cubic feet)<sup>5</sup></b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.1%</b>
<b>Total Lower 48 Wells Drilled (thousands) .....</b>	<b>41.54</b>	<b>49.72</b>	<b>52.52</b>	<b>42.84</b>	<b>38.35</b>	<b>35.53</b>	<b>35.78</b>	<b>-1.4%</b>

<sup>1</sup>Represents lower 48 onshore and offshore supplies.

<sup>2</sup>Includes lease condensate.

<sup>3</sup>Marketed production (wet) minus extraction losses.

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

<sup>5</sup>Synthetic 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.D112607A.

**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	
<b>Production<sup>1</sup></b>								
Appalachia .....	397	392	357	335	339	345	346	-0.5%
Interior .....	149	151	156	186	206	227	251	2.1%
West .....	585	619	626	684	744	870	998	2.0%
East of the Mississippi .....	494	491	459	454	462	487	506	0.1%
West of the Mississippi .....	638	672	680	751	827	955	1089	2.0%
<b>Total .....</b>	<b>1131</b>	<b>1163</b>	<b>1139</b>	<b>1205</b>	<b>1289</b>	<b>1442</b>	<b>1595</b>	<b>1.3%</b>
<b>Waste Coal Supplied<sup>2</sup> .....</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>13</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>-0.3%</b>
<b>Net Imports</b>								
Imports <sup>3</sup> .....	29	34	37	42	80	85	111	5.0%
Exports .....	50	50	48	35	35	37	36	-1.4%
<b>Total .....</b>	<b>-21</b>	<b>-15</b>	<b>-11</b>	<b>7</b>	<b>45</b>	<b>49</b>	<b>75</b>	<b>--</b>
<b>Total Supply<sup>4</sup> .....</b>	<b>1124</b>	<b>1161</b>	<b>1141</b>	<b>1225</b>	<b>1345</b>	<b>1503</b>	<b>1683</b>	<b>1.6%</b>
<b>Consumption by Sector</b>								
Residential and Commercial .....	4	4	4	4	4	4	4	-0.2%
Coke Plants .....	23	23	21	20	20	20	19	-0.7%
Other Industrial <sup>5</sup> .....	60	61	61	59	59	59	59	-0.1%
Coal-to-Liquids Heat and Power .....	0	0	0	11	23	45	86	--
Coal to Liquids Production .....	0	0	0	9	19	38	71	--
Electric Power <sup>6</sup> .....	1037	1026	1055	1120	1219	1336	1443	1.4%
<b>Total .....</b>	<b>1125</b>	<b>1114</b>	<b>1141</b>	<b>1225</b>	<b>1344</b>	<b>1503</b>	<b>1682</b>	<b>1.7%</b>
<b>Discrepancy and Stock Change<sup>7</sup> .....</b>	<b>-2</b>	<b>47</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>--</b>
<b>Average Minemouth Price<sup>8</sup></b>								
(2006 dollars per short ton) .....	24.08	24.63	24.53	23.04	22.63	23.15	23.45	-0.2%
(2006 dollars per million Btu) .....	1.18	1.21	1.21	1.15	1.15	1.18	1.21	-0.0%
<b>Delivered Prices (2006 dollars per short ton)<sup>9</sup></b>								
Coke Plants .....	86.43	92.87	101.43	92.55	92.22	94.56	96.70	0.2%
Other Industrial <sup>5</sup> .....	49.13	51.67	50.80	48.97	48.85	49.75	50.58	-0.1%
Coal to Liquids .....	--	--	--	18.35	18.30	18.31	20.38	--
Electric Power								
(2006 dollars per short ton) .....	32.01	33.85	35.98	34.38	33.93	34.83	36.02	0.3%
(2006 dollars per million Btu) .....	1.59	1.69	1.81	1.74	1.73	1.77	1.82	0.3%
<b>Average .....</b>	<b>34.04</b>	<b>36.00</b>	<b>37.97</b>	<b>35.77</b>	<b>34.98</b>	<b>35.31</b>	<b>35.77</b>	<b>-0.0%</b>
Exports <sup>10</sup> .....	69.22	70.93	75.23	71.41	75.13	78.04	79.22	0.5%

<sup>1</sup>Includes anthracite, bituminous coal, subbituminous coal, and lignite.

<sup>2</sup>Includes 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.

<sup>3</sup>Excludes imports to Puerto Rico and the U.S. Virgin Islands.

<sup>4</sup>Production plus waste coal supplied plus net imports.

<sup>5</sup>Includes 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.

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

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

<sup>8</sup>Includes reported prices for both open market and captive mines.

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

<sup>10</sup>F.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.D112607A. Projections: EIA, AEO2008 National Energy Modeling System run AEO2008.D112607A.

**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	
<b>Electric Power Sector<sup>1</sup></b>								
<b>Net Summer Capacity</b>								
Conventional Hydropower	76.72	76.72	76.73	77.18	77.24	77.24	77.24	0.0%
Geothermal <sup>2</sup>	2.23	2.29	2.50	2.85	3.11	3.51	3.78	2.1%
Municipal Waste <sup>3</sup>	3.21	3.39	3.93	3.93	3.96	4.05	4.34	1.0%
Wood and Other Biomass <sup>4,5</sup>	1.96	2.01	2.20	2.82	4.64	5.22	5.82	4.5%
Solar Thermal	0.40	0.40	0.54	0.80	0.82	0.84	0.86	3.2%
Solar Photovoltaic <sup>6</sup>	0.03	0.03	0.07	0.14	0.22	0.30	0.39	11.2%
Wind	8.92	11.50	25.56	29.58	34.89	40.13	43.34	5.7%
Offshore Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
<b>Total</b>	<b>93.46</b>	<b>96.34</b>	<b>111.54</b>	<b>117.29</b>	<b>124.88</b>	<b>131.30</b>	<b>135.78</b>	<b>1.4%</b>
<b>Generation (billion kilowatthours)</b>								
Conventional Hydropower	266.91	285.07	289.45	297.43	297.93	298.04	298.17	0.2%
Geothermal <sup>2</sup>	14.69	14.84	17.52	20.60	22.66	25.80	27.96	2.7%
Biogenic Municipal Waste <sup>7</sup>	12.70	13.46	18.43	18.43	18.67	19.39	21.66	2.0%
Wood and Other Biomass <sup>5</sup>	10.57	10.97	23.12	49.17	82.74	92.70	95.87	9.5%
Dedicated Plants	8.60	9.06	10.98	16.29	30.19	34.90	39.37	6.3%
Cofiring	1.97	1.91	12.13	32.88	52.55	57.80	56.50	15.2%
Solar Thermal	0.54	0.49	1.15	1.97	2.04	2.11	2.18	6.4%
Solar Photovoltaic <sup>6</sup>	0.02	0.01	0.16	0.32	0.52	0.74	0.96	19.6%
Wind	17.81	25.78	74.00	86.87	105.47	123.41	134.35	7.1%
Offshore Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	--
<b>Total</b>	<b>323.23</b>	<b>350.62</b>	<b>423.83</b>	<b>474.79</b>	<b>530.02</b>	<b>562.19</b>	<b>581.15</b>	<b>2.1%</b>
<b>End-Use Generators<sup>8</sup></b>								
<b>Net Summer Capacity</b>								
Conventional Hydropower <sup>9</sup>	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 <sup>10</sup>	0.34	0.35	0.35	0.35	0.35	0.35	0.35	0.0%
Biomass	4.72	4.64	4.89	5.15	5.62	6.10	6.44	1.4%
Solar Photovoltaic <sup>6</sup>	0.18	0.27	0.66	0.77	1.11	1.73	2.67	10.0%
Wind	0.01	0.04	0.04	0.05	0.10	0.18	0.27	8.2%
<b>Total</b>	<b>5.96</b>	<b>6.00</b>	<b>6.65</b>	<b>7.02</b>	<b>7.88</b>	<b>9.06</b>	<b>10.44</b>	<b>2.3%</b>
<b>Generation (billion kilowatthours)</b>								
Conventional Hydropower <sup>9</sup>	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 <sup>10</sup>	1.95	2.06	2.82	2.82	2.82	2.82	2.82	1.3%
Biomass	28.33	28.44	29.95	31.52	34.28	37.06	39.06	1.3%
Solar Photovoltaic <sup>6</sup>	0.28	0.43	1.06	1.24	1.82	2.89	4.51	10.3%
Wind	0.02	0.06	0.06	0.07	0.14	0.26	0.40	8.5%
<b>Total</b>	<b>34.03</b>	<b>34.22</b>	<b>37.13</b>	<b>38.89</b>	<b>42.30</b>	<b>46.27</b>	<b>50.03</b>	<b>1.6%</b>

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

<sup>2</sup>Includes hydrothermal resources only (hot water and steam).

<sup>3</sup>Includes 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.

<sup>4</sup>Facilities co-firing biomass and coal are classified as coal.

<sup>5</sup>Includes projections for energy crops after 2012.

<sup>6</sup>Does not include off-grid photovoltaics (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.

<sup>7</sup>Includes 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).

<sup>8</sup>Includes 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.

<sup>9</sup>Represents own-use industrial hydroelectric power.

<sup>10</sup>Includes 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.D112607A.

**Table A17. Renewable Energy, Consumption by Sector and Source<sup>1</sup>**  
(Quadrillion Btu per Year)

Sector and Source	Reference Case							Annual Growth 2006-2030 (percent)
	2005	2006	2010	2015	2020	2025	2030	
<b>Marketed Renewable Energy<sup>2</sup></b>								
<b>Residential (wood)</b> .....	0.49	0.47	0.48	0.46	0.45	0.44	0.43	-0.4%
<b>Commercial (biomass)</b> .....	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.0%
<b>Industrial<sup>3</sup></b> .....	1.88	1.95	2.36	2.43	2.55	2.67	2.80	1.5%
Conventional Hydroelectric .....	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0%
Municipal Waste <sup>4</sup> .....	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.0%
Biomass .....	1.45	1.47	1.47	1.54	1.64	1.74	1.83	0.9%
Biofuels Heat and Coproducts .....	0.24	0.30	0.71	0.71	0.73	0.75	0.79	4.1%
<b>Transportation</b> .....	0.35	0.50	1.09	1.20	1.40	1.71	1.87	5.6%
Ethanol used in E85 <sup>5</sup> .....	0.00	0.00	0.00	0.00	0.00	0.01	0.01	11.1%
Ethanol used in Gasoline Blending .....	0.34	0.47	1.07	1.16	1.23	1.30	1.42	4.7%
Biodiesel used in Distillate Blending .....	0.01	0.03	0.01	0.04	0.16	0.41	0.44	11.5%
<b>Electric Power<sup>6</sup></b> .....	3.36	3.74	4.52	5.10	5.68	6.08	6.31	2.2%
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	0.47	0.53	0.64	0.70	3.4%
Biogenic Municipal Waste <sup>7</sup> .....	0.20	0.15	0.22	0.22	0.22	0.23	0.26	2.3%
Biomass .....	0.18	0.16	0.28	0.55	0.88	0.97	0.99	8.0%
Dedicated Plants .....	0.14	0.12	0.12	0.16	0.30	0.34	0.38	4.9%
Cofiring .....	0.04	0.03	0.16	0.39	0.58	0.63	0.61	12.9%
Solar Thermal .....	0.00	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 .....	0.00	0.26	0.74	0.87	1.06	1.24	1.35	7.1%
<b>Total Marketed Renewable Energy</b> .....	<b>6.21</b>	<b>6.79</b>	<b>8.58</b>	<b>9.32</b>	<b>10.21</b>	<b>11.03</b>	<b>11.53</b>	<b>2.2%</b>
<b>Sources of Ethanol</b>								
From Corn .....	0.33	0.41	1.01	1.01	1.04	1.07	1.13	4.3%
From Cellulose .....	0.00	0.00	0.01	0.01	0.01	0.01	0.01	--
Net Imports .....	0.01	0.06	0.05	0.14	0.19	0.22	0.29	6.8%
<b>Total</b> .....	<b>0.34</b>	<b>0.47</b>	<b>1.08</b>	<b>1.16</b>	<b>1.24</b>	<b>1.31</b>	<b>1.43</b>	<b>4.7%</b>
<b>Nonmarketed Renewable Energy<sup>8</sup></b>								
<b>Selected Consumption</b>								
<b>Residential</b> .....	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.05</b>	<b>0.07</b>	<b>0.10</b>	<b>0.13</b>	<b>9.1%</b>
Solar Hot Water Heating .....	0.02	0.01	0.02	0.02	0.03	0.04	0.04	6.1%
Geothermal Heat Pumps .....	0.00	0.01	0.01	0.03	0.04	0.06	0.08	12.1%
Solar Photovoltaic .....	0.00	0.00	0.00	0.00	0.00	0.00	0.01	16.2%
Wind .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
<b>Commercial</b> .....	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.04</b>	<b>0.04</b>	<b>1.7%</b>
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	8.8%
Wind .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.1%

<sup>1</sup>Actual 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.

<sup>2</sup>Includes 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.

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

<sup>4</sup>Includes 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.

<sup>5</sup>Excludes motor gasoline component of E85.

<sup>6</sup>Includes 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.

<sup>7</sup>Includes 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).

<sup>8</sup>Includes 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.D112607A.

**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	
<b>Residential</b>								
Petroleum .....	101	100	94	94	93	90	87	-0.6%
Natural Gas .....	262	237	263	274	282	284	283	0.7%
Coal .....	1	1	1	1	1	1	1	0.9%
Electricity <sup>1</sup> .....	890	866	904	952	998	1064	1138	1.1%
<b>Total .....</b>	<b>1253</b>	<b>1205</b>	<b>1263</b>	<b>1320</b>	<b>1373</b>	<b>1438</b>	<b>1509</b>	<b>0.9%</b>
<b>Commercial</b>								
Petroleum .....	52	53	49	51	52	52	52	-0.1%
Natural Gas .....	169	155	167	179	189	197	207	1.2%
Coal .....	9	6	8	8	8	8	8	1.0%
Electricity <sup>1</sup> .....	835	832	869	943	1028	1122	1216	1.6%
<b>Total .....</b>	<b>1066</b>	<b>1046</b>	<b>1093</b>	<b>1181</b>	<b>1277</b>	<b>1379</b>	<b>1482</b>	<b>1.5%</b>
<b>Industrial<sup>2</sup></b>								
Petroleum .....	412	421	434	440	443	451	458	0.3%
Natural Gas <sup>3</sup> .....	409	399	430	430	440	449	454	0.5%
Coal .....	189	189	178	191	208	240	297	1.9%
Electricity <sup>1</sup> .....	668	641	631	638	656	674	684	0.3%
<b>Total .....</b>	<b>1677</b>	<b>1651</b>	<b>1672</b>	<b>1698</b>	<b>1748</b>	<b>1814</b>	<b>1893</b>	<b>0.6%</b>
<b>Transportation</b>								
Petroleum <sup>4</sup> .....	1948	1952	1966	2075	2203	2319	2439	0.9%
Natural Gas <sup>5</sup> .....	33	33	35	37	40	43	44	1.2%
Electricity <sup>1</sup> .....	4	4	4	5	5	5	6	1.3%
<b>Total .....</b>	<b>1985</b>	<b>1989</b>	<b>2006</b>	<b>2117</b>	<b>2248</b>	<b>2366</b>	<b>2488</b>	<b>0.9%</b>
<b>Electric Power<sup>6</sup></b>								
Petroleum .....	101	55	44	42	44	46	47	-0.6%
Natural Gas .....	321	340	360	379	353	311	279	-0.8%
Coal .....	1964	1938	1993	2104	2277	2497	2706	1.4%
Other <sup>7</sup> .....	12	12	12	12	12	12	12	0.1%
<b>Total .....</b>	<b>2397</b>	<b>2344</b>	<b>2409</b>	<b>2537</b>	<b>2687</b>	<b>2866</b>	<b>3044</b>	<b>1.1%</b>
<b>Total by Fuel</b>								
Petroleum <sup>3</sup> .....	2615	2581	2587	2702	2835	2957	3082	0.7%
Natural Gas .....	1193	1163	1255	1299	1305	1283	1267	0.4%
Coal .....	2162	2134	2180	2303	2493	2745	3012	1.4%
Other <sup>7</sup> .....	12	12	12	12	12	12	12	0.1%
<b>Total .....</b>	<b>5982</b>	<b>5890</b>	<b>6034</b>	<b>6316</b>	<b>6646</b>	<b>6997</b>	<b>7373</b>	<b>0.9%</b>
<b>Carbon Dioxide Emissions</b>								
<b>(tons per person) .....</b>	<b>20.1</b>	<b>19.6</b>	<b>19.4</b>	<b>19.5</b>	<b>19.7</b>	<b>19.9</b>	<b>20.2</b>	<b>0.1%</b>

<sup>1</sup>Emissions from the electric power sector are distributed to the end-use sectors.

<sup>2</sup>Fuel 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.

<sup>3</sup>Includes lease and plant fuel.

<sup>4</sup>This 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 2004, international bunker fuels accounted for 83 to 115 million metric tons annually.

<sup>5</sup>Includes pipeline fuel natural gas and compressed natural gas used as vehicle fuel.

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

<sup>7</sup>Includes 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.D112607A.

**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	
<b>Real Gross Domestic Product</b> .....	<b>11004</b>	<b>11319</b>	<b>12555</b>	<b>14222</b>	<b>16177</b>	<b>18334</b>	<b>20832</b>	<b>2.6%</b>
<b>Components of Real Gross Domestic Product</b>								
Real Consumption .....	7804	8044	8974	10212	11561	13019	14640	2.5%
Real Investment .....	1869	1920	2029	2331	2687	3208	3970	3.1%
Real Government Spending .....	1946	1981	2086	2172	2281	2395	2537	1.0%
Real Exports .....	1203	1304	1764	2447	3424	4658	6263	6.8%
Real Imports .....	1821	1929	2273	2868	3630	4702	6209	5.0%
<b>Energy Intensity</b> (thousand Btu per 2000 dollar of GDP)								
Delivered Energy .....	6.64	6.43	6.01	5.53	5.09	4.69	4.30	-1.7%
Total Energy .....	9.12	8.83	8.25	7.60	7.02	6.48	5.94	-1.6%
<b>Price Indices</b>								
GDP Chain-type Price Index (2000=1.000) ...	1.130	1.166	1.267	1.384	1.509	1.663	1.838	1.9%
Consumer Price Index (1982-4=1.00)								
All-urban .....	1.95	2.02	2.18	2.37	2.59	2.88	3.20	1.9%
Energy Commodities and Services .....	1.77	1.97	2.10	2.14	2.37	2.72	3.11	1.9%
Wholesale Price Index (1982=1.00)								
All Commodities .....	1.57	1.65	1.78	1.83	1.93	2.06	2.20	1.2%
Fuel and Power .....	1.56	1.67	1.80	1.80	1.98	2.31	2.68	2.0%
<b>Interest Rates (percent, nominal)</b>								
Federal Funds Rate .....	3.21	4.96	4.93	4.64	5.03	5.03	4.86	--
10-Year Treasury Note .....	4.29	4.79	5.57	5.21	5.40	5.43	5.34	--
AA Utility Bond Rate .....	5.44	5.84	6.98	6.80	6.87	6.90	7.01	--
<b>Value of Shipments (billion 2000 dollars)</b>								
Total Industrial .....	5622	5723	5882	6429	7044	7634	8226	1.5%
Nonmanufacturing .....	1525	1531	1494	1606	1672	1731	1804	0.7%
Manufacturing .....	4097	4192	4389	4823	5372	5903	6422	1.8%
Energy-Intensive .....	1165	1178	1204	1266	1338	1397	1442	0.8%
Non-energy Intensive .....	2933	3014	3185	3557	4034	4506	4980	2.1%
<b>Population and Employment (millions)</b>								
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	143.4	149.4	155.3	161.8	168.4	0.9%
Employment, Manufacturing .....	14.2	14.2	14.0	13.9	13.6	12.6	11.3	-1.0%
<b>Key Labor Indicators</b>								
Labor Force (millions) .....	149.3	151.4	157.6	162.5	166.3	171.9	178.6	0.7%
Nonfarm Labor Productivity (1992=1.00) .....	1.34	1.35	1.45	1.60	1.78	1.99	2.22	2.1%
Unemployment Rate (percent) .....	5.07	4.63	4.53	4.56	4.20	4.34	4.54	--
<b>Key Indicators for Energy Demand</b>								
Real Disposable Personal Income .....	8148	8397	9594	11083	12811	14743	16916	3.0%
Housing Starts (millions) .....	2.22	1.93	1.85	1.90	1.84	1.78	1.72	-0.5%
Commercial Floorspace (billion square feet) ..	73.8	74.8	78.7	83.8	89.3	94.9	100.9	1.3%
Unit Sales of Light-Duty Vehicles (millions) ...	16.95	16.50	16.92	18.12	18.72	19.20	20.04	0.8%

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.D112607A.