

# Economic Growth Case Comparisons

**Table B1. Total Energy Supply and Disposition Summary**  
(Quadrillion Btu per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	2006	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
<b>Production</b>										
Crude Oil and Lease Condensate	10.80	12.75	12.76	12.77	13.38	13.40	13.52	11.87	12.04	12.18
Natural Gas Plant Liquids	2.36	2.26	2.27	2.29	2.25	2.31	2.36	2.01	2.11	2.20
Dry Natural Gas	19.04	19.53	19.85	20.13	19.50	20.24	20.63	19.07	20.00	21.10
Coal <sup>1</sup>	23.79	23.95	23.97	24.00	23.63	25.20	27.23	25.47	28.63	32.20
Nuclear Power	8.21	8.31	8.31	8.31	8.90	9.05	9.26	8.72	9.57	10.92
Hydropower	2.89	2.92	2.92	2.92	2.99	3.00	3.00	2.99	3.00	3.00
Biomass <sup>2</sup>	2.94	4.02	4.05	4.10	6.29	6.42	6.61	7.84	8.12	8.53
Other Renewable Energy <sup>3</sup>	0.88	1.46	1.51	1.51	1.78	2.00	2.08	2.09	2.45	2.61
Other <sup>4</sup>	0.50	0.53	0.54	0.54	0.59	0.58	0.58	0.64	0.64	0.65
<b>Total</b>	<b>71.41</b>	<b>75.71</b>	<b>76.17</b>	<b>76.56</b>	<b>79.31</b>	<b>82.21</b>	<b>85.27</b>	<b>80.71</b>	<b>86.56</b>	<b>93.39</b>
<b>Imports</b>										
Crude Oil	22.08	20.76	21.14	21.33	20.61	21.58	22.36	22.66	24.41	25.77
Liquid Fuels and Other Petroleum <sup>5</sup>	7.21	5.44	5.61	6.02	4.61	5.43	6.41	3.90	5.44	6.93
Natural Gas	4.29	4.70	4.80	4.89	4.42	4.68	4.93	4.16	4.64	4.80
Other Imports <sup>6</sup>	0.98	0.94	0.95	0.95	1.96	1.93	1.95	2.80	2.74	2.85
<b>Total</b>	<b>34.57</b>	<b>31.84</b>	<b>32.49</b>	<b>33.20</b>	<b>31.60</b>	<b>33.62</b>	<b>35.65</b>	<b>33.52</b>	<b>37.22</b>	<b>40.36</b>
<b>Exports</b>										
Petroleum <sup>7</sup>	2.60	2.83	2.82	2.84	3.00	2.98	3.00	3.42	3.33	3.11
Natural Gas	0.73	0.85	0.84	0.84	1.05	1.02	1.00	1.43	1.36	1.30
Coal	1.26	1.79	1.79	1.79	0.88	0.87	0.86	0.88	0.88	0.88
<b>Total</b>	<b>4.59</b>	<b>5.47</b>	<b>5.45</b>	<b>5.47</b>	<b>4.93</b>	<b>4.87</b>	<b>4.86</b>	<b>5.73</b>	<b>5.56</b>	<b>5.29</b>
<b>Discrepancy<sup>8</sup></b>	<b>1.87</b>	<b>-0.10</b>	<b>-0.13</b>	<b>-0.17</b>	<b>0.17</b>	<b>0.12</b>	<b>0.02</b>	<b>0.29</b>	<b>0.21</b>	<b>0.07</b>
<b>Consumption</b>										
Liquid Fuels and Other Petroleum <sup>9</sup>	40.06	39.85	40.46	41.12	40.15	42.24	44.43	40.08	43.99	48.01
Natural Gas	22.30	23.51	23.93	24.31	22.99	24.01	24.68	21.91	23.39	24.71
Coal <sup>10</sup>	22.50	23.00	23.03	23.06	24.48	25.87	27.74	27.00	29.90	32.99
Nuclear Power	8.21	8.31	8.31	8.31	8.90	9.05	9.26	8.72	9.57	10.92
Hydropower	2.89	2.92	2.92	2.92	2.99	3.00	3.00	2.99	3.00	3.00
Biomass <sup>11</sup>	2.50	2.97	3.01	3.06	4.35	4.50	4.69	5.23	5.51	5.94
Other Renewable Energy <sup>3</sup>	0.88	1.46	1.51	1.51	1.78	2.00	2.08	2.09	2.45	2.61
Other <sup>12</sup>	0.19	0.18	0.18	0.18	0.17	0.17	0.17	0.18	0.20	0.20
<b>Total</b>	<b>99.52</b>	<b>102.19</b>	<b>103.34</b>	<b>104.46</b>	<b>105.82</b>	<b>110.85</b>	<b>116.04</b>	<b>108.21</b>	<b>118.01</b>	<b>128.38</b>

# Economic Growth Case Comparisons

**Table B1. Total Energy Supply and Disposition Summary (Continued)**  
(Quadrillion Btu per Year, Unless Otherwise Noted)

Supply, Disposition, and Prices	2006	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
<b>Prices (2006 dollars per unit)</b>										
Petroleum (dollars per barrel)										
Imported Low Sulfur Light Crude Oil Price ...	66.02	73.52	74.03	74.56	58.73	59.70	60.62	68.43	70.45	72.15
Imported Crude Oil Price <sup>13</sup> .....	59.05	64.48	65.18	66.21	50.37	51.55	52.42	55.52	58.66	62.27
Natural Gas (dollars per million Btu)										
Price at Henry Hub .....	6.73	6.69	6.90	7.11	5.72	5.95	5.93	6.84	7.22	7.61
Wellhead Price <sup>14</sup> .....	6.24	5.96	6.16	6.35	5.08	5.29	5.27	6.10	6.45	6.80
Natural Gas (dollars per thousand cubic feet)										
Wellhead Price <sup>14</sup> .....	6.42	6.13	6.33	6.53	5.22	5.44	5.43	6.27	6.63	7.00
Coal (dollars per ton)										
Minemouth Price <sup>15</sup> .....	24.63	26.02	26.16	26.33	22.24	22.51	23.16	22.15	23.32	24.09
Coal (dollars per million Btu)										
Minemouth Price <sup>15</sup> .....	1.21	1.27	1.28	1.29	1.12	1.14	1.18	1.13	1.19	1.24
Average Delivered Price <sup>16</sup> .....	1.78	1.92	1.93	1.94	1.74	1.77	1.81	1.76	1.82	1.87
Average Electricity Price (cents per kilowatt-hour) .....										
	8.9	9.1	9.2	9.3	8.3	8.6	8.7	8.6	8.8	9.1

<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>Excludes coal converted to coal-based synthetic liquids.

<sup>11</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>12</sup>Includes non-biogenic municipal waste and net electricity imports.

<sup>13</sup>Weighted average price delivered to U.S. refiners.

<sup>14</sup>Represents lower 48 onshore and offshore supplies.

<sup>15</sup>Includes reported prices for both open market and captive mines.

<sup>16</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 2006 are model results and may differ slightly from official EIA data reports.

Sources: 2006 natural gas supply values and natural gas wellhead price: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). 2006 coal minemouth and delivered coal prices: EIA, *Annual Coal Report 2006*, DOE/EIA-0584(2006) (Washington, DC, November 2007). 2006 petroleum supply values: EIA, *Petroleum Supply Annual 2006*, DOE/EIA-0340(2006)/1 (Washington, DC, September 2007). 2006 low sulfur light crude oil price: EIA, Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report." Other 2006 coal values: *Quarterly Coal Report, October-December 2006*, DOE/EIA-0121(2006/4Q) (Washington, DC, March 2007). Other 2006 values: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). Projections: EIA, AEO2008 National Energy Modeling System runs LM2008.D031608A, AEO2008.D030208F, and HM2008.D031608A.

## Economic Growth Case Comparisons

**Table B2. Energy Consumption by Sector and Source**  
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	2006	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
<b>Energy Consumption</b>										
<b>Residential</b>										
Liquefied Petroleum Gases	0.47	0.48	0.48	0.48	0.51	0.52	0.53	0.52	0.55	0.58
Kerosene	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.08	0.09
Distillate Fuel Oil	0.70	0.76	0.75	0.75	0.73	0.73	0.73	0.65	0.65	0.65
Liquid Fuels and Other Petroleum Subtotal	1.25	1.31	1.31	1.32	1.32	1.33	1.35	1.26	1.29	1.32
Natural Gas	4.50	4.94	4.95	4.96	5.18	5.30	5.44	5.07	5.32	5.57
Coal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Renewable Energy <sup>1</sup>	0.41	0.44	0.44	0.44	0.40	0.40	0.41	0.36	0.38	0.39
Electricity	4.61	4.93	4.95	4.97	5.10	5.25	5.41	5.52	5.88	6.22
<b>Delivered Energy</b>	<b>10.77</b>	<b>11.63</b>	<b>11.66</b>	<b>11.69</b>	<b>12.01</b>	<b>12.30</b>	<b>12.63</b>	<b>12.23</b>	<b>12.88</b>	<b>13.52</b>
Electricity Related Losses	10.04	10.58	10.59	10.60	10.81	11.08	11.36	11.54	12.14	12.74
<b>Total</b>	<b>20.82</b>	<b>22.22</b>	<b>22.25</b>	<b>22.29</b>	<b>22.82</b>	<b>23.39</b>	<b>23.99</b>	<b>23.77</b>	<b>25.01</b>	<b>26.25</b>
<b>Commercial</b>										
Liquefied Petroleum Gases	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10
Motor Gasoline <sup>2</sup>	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Kerosene	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Distillate Fuel Oil	0.42	0.38	0.38	0.38	0.41	0.41	0.42	0.40	0.41	0.42
Residual Fuel Oil	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Liquid Fuels and Other Petroleum Subtotal	0.68	0.63	0.63	0.63	0.67	0.68	0.69	0.67	0.68	0.70
Natural Gas	2.92	3.02	3.04	3.06	3.34	3.47	3.60	3.54	3.78	4.03
Coal	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Renewable Energy <sup>3</sup>	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Electricity	4.43	4.69	4.73	4.75	5.49	5.67	5.84	6.24	6.62	7.01
<b>Delivered Energy</b>	<b>8.25</b>	<b>8.56</b>	<b>8.62</b>	<b>8.65</b>	<b>9.71</b>	<b>10.03</b>	<b>10.34</b>	<b>10.66</b>	<b>11.30</b>	<b>11.95</b>
Electricity Related Losses	9.66	10.07	10.12	10.14	11.63	11.96	12.26	13.04	13.68	14.34
<b>Total</b>	<b>17.91</b>	<b>18.63</b>	<b>18.74</b>	<b>18.80</b>	<b>21.34</b>	<b>21.98</b>	<b>22.60</b>	<b>23.70</b>	<b>24.98</b>	<b>26.29</b>
<b>Industrial<sup>4</sup></b>										
Liquefied Petroleum Gases	2.09	2.07	2.12	2.18	1.65	1.83	2.04	1.40	1.71	2.05
Motor Gasoline <sup>2</sup>	0.38	0.36	0.38	0.39	0.34	0.37	0.41	0.33	0.38	0.43
Distillate Fuel Oil	1.28	1.24	1.29	1.34	1.12	1.23	1.34	1.07	1.23	1.40
Residual Fuel Oil	0.28	0.27	0.28	0.29	0.22	0.23	0.24	0.20	0.23	0.25
Petrochemical Feedstocks	1.41	1.32	1.36	1.41	1.22	1.39	1.57	1.01	1.29	1.60
Other Petroleum <sup>5</sup>	4.48	4.11	4.25	4.38	3.99	4.22	4.48	4.02	4.41	4.79
Liquid Fuels and Other Petroleum Subtotal	9.92	9.38	9.67	9.98	8.53	9.27	10.07	8.03	9.25	10.53
Natural Gas	6.68	7.03	7.16	7.24	6.67	7.14	7.60	6.14	7.08	7.94
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lease and Plant Fuel <sup>6</sup>	1.17	1.20	1.21	1.22	1.22	1.25	1.27	1.23	1.27	1.32
Natural Gas Subtotal	7.85	8.23	8.37	8.47	7.89	8.39	8.87	7.37	8.35	9.26
Metallurgical Coal	0.60	0.59	0.60	0.61	0.49	0.54	0.58	0.39	0.48	0.57
Other Industrial Coal	1.26	1.29	1.31	1.32	1.15	1.20	1.24	1.10	1.18	1.25
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.15	0.34	0.58	0.34	0.55	1.27
Net Coal Coke Imports	0.06	0.03	0.03	0.03	0.03	0.04	0.04	0.02	0.04	0.06
Coal Subtotal	1.92	1.91	1.93	1.96	1.82	2.11	2.45	1.84	2.26	3.15
Biofuels Heat and Coproducts	0.30	0.68	0.67	0.67	1.50	1.49	1.49	2.34	2.31	2.29
Renewable Energy <sup>7</sup>	1.69	1.62	1.66	1.71	1.70	1.83	1.98	1.71	2.02	2.33
Electricity	3.42	3.44	3.50	3.57	3.32	3.59	3.87	2.94	3.52	4.10
<b>Delivered Energy</b>	<b>25.10</b>	<b>25.26</b>	<b>25.82</b>	<b>26.36</b>	<b>24.75</b>	<b>26.70</b>	<b>28.73</b>	<b>24.23</b>	<b>27.70</b>	<b>31.67</b>
Electricity Related Losses	7.45	7.38	7.50	7.62	7.03	7.57	8.13	6.14	7.28	8.39
<b>Total</b>	<b>32.55</b>	<b>32.64</b>	<b>33.32</b>	<b>33.98</b>	<b>31.78</b>	<b>34.27</b>	<b>36.86</b>	<b>30.37</b>	<b>34.98</b>	<b>40.06</b>

# Economic Growth Case Comparisons

**Table B2. Energy Consumption by Sector and Source (Continued)**  
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	2006	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
<b>Transportation</b>										
Liquefied Petroleum Gases	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02
E85 <sup>8</sup>	0.00	0.00	0.00	0.00	1.07	0.97	0.95	1.53	1.34	1.26
Motor Gasoline <sup>2</sup>	17.20	17.13	17.25	17.40	15.81	16.56	17.32	14.66	15.97	17.34
Jet Fuel <sup>9</sup>	3.16	3.41	3.44	3.47	4.10	4.15	4.13	4.62	4.79	4.83
Distillate Fuel Oil <sup>10</sup>	6.18	6.38	6.54	6.72	7.05	7.63	8.26	7.67	8.98	10.30
Residual Fuel Oil	0.83	0.85	0.85	0.86	0.85	0.86	0.87	0.86	0.87	0.88
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum <sup>11</sup>	0.18	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.19
Liquid Fuels and Other Petroleum Subtotal	27.57	27.97	28.29	28.63	29.06	30.37	31.72	29.53	32.15	34.82
Pipeline Fuel Natural Gas	0.59	0.63	0.64	0.65	0.66	0.69	0.71	0.68	0.72	0.76
Compressed Natural Gas	0.02	0.03	0.04	0.04	0.06	0.07	0.08	0.07	0.08	0.10
Electricity	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03
<b>Delivered Energy</b>	<b>28.20</b>	<b>28.66</b>	<b>28.98</b>	<b>29.34</b>	<b>29.81</b>	<b>31.15</b>	<b>32.53</b>	<b>30.31</b>	<b>32.98</b>	<b>35.71</b>
Electricity Related Losses	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
<b>Total</b>	<b>28.25</b>	<b>28.70</b>	<b>29.03</b>	<b>29.39</b>	<b>29.87</b>	<b>31.21</b>	<b>32.59</b>	<b>30.38</b>	<b>33.04</b>	<b>35.77</b>
<b>Delivered Energy Consumption for All Sectors</b>										
Liquefied Petroleum Gases	2.65	2.65	2.70	2.76	2.26	2.45	2.68	2.03	2.37	2.75
E85 <sup>8</sup>	0.00	0.00	0.00	0.00	1.07	0.97	0.95	1.53	1.34	1.26
Motor Gasoline <sup>2</sup>	17.62	17.54	17.68	17.84	16.20	16.99	17.78	15.04	16.40	17.83
Jet Fuel <sup>9</sup>	3.16	3.41	3.44	3.47	4.10	4.15	4.13	4.62	4.79	4.83
Kerosene	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.12	0.13	0.13
Distillate Fuel Oil	8.59	8.76	8.97	9.19	9.31	10.00	10.74	9.80	11.28	12.77
Residual Fuel Oil	1.23	1.22	1.23	1.24	1.17	1.19	1.21	1.15	1.20	1.24
Petrochemical Feedstocks	1.41	1.32	1.36	1.41	1.22	1.39	1.57	1.01	1.29	1.60
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum <sup>12</sup>	4.64	4.27	4.40	4.54	4.14	4.38	4.64	4.18	4.56	4.96
Liquid Fuels and Other Petroleum Subtotal	39.41	39.30	39.90	40.56	39.58	41.65	43.83	39.49	43.37	47.37
Natural Gas	14.12	15.03	15.19	15.30	15.25	15.98	16.72	14.82	16.27	17.64
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lease and Plant Fuel <sup>6</sup>	1.17	1.20	1.21	1.22	1.22	1.25	1.27	1.23	1.27	1.32
Pipeline Natural Gas	0.59	0.63	0.64	0.65	0.66	0.69	0.71	0.68	0.72	0.76
Natural Gas Subtotal	15.88	16.86	17.04	17.17	17.13	17.93	18.70	16.73	18.26	19.73
Metallurgical Coal	0.60	0.59	0.60	0.61	0.49	0.54	0.58	0.39	0.48	0.57
Other Coal	1.35	1.38	1.40	1.41	1.24	1.29	1.33	1.19	1.27	1.34
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.15	0.34	0.58	0.34	0.55	1.27
Net Coal Coke Imports	0.06	0.03	0.03	0.03	0.03	0.04	0.04	0.02	0.04	0.06
Coal Subtotal	2.02	2.00	2.03	2.05	1.92	2.21	2.54	1.93	2.35	3.25
Biofuels Heat and Coproducts	0.30	0.68	0.67	0.67	1.50	1.49	1.49	2.34	2.31	2.29
Renewable Energy <sup>13</sup>	2.23	2.19	2.23	2.28	2.22	2.37	2.52	2.21	2.52	2.85
Electricity	12.49	13.08	13.20	13.31	13.93	14.54	15.16	14.74	16.05	17.36
<b>Delivered Energy</b>	<b>72.32</b>	<b>74.10</b>	<b>75.08</b>	<b>76.05</b>	<b>76.28</b>	<b>80.18</b>	<b>84.23</b>	<b>77.43</b>	<b>84.86</b>	<b>92.85</b>
Electricity Related Losses	27.19	28.08	28.26	28.41	29.54	30.67	31.81	30.78	33.16	35.54
<b>Total</b>	<b>99.52</b>	<b>102.19</b>	<b>103.34</b>	<b>104.46</b>	<b>105.82</b>	<b>110.85</b>	<b>116.04</b>	<b>108.21</b>	<b>118.01</b>	<b>128.38</b>
<b>Electric Power<sup>14</sup></b>										
Distillate Fuel Oil	0.18	0.18	0.18	0.18	0.18	0.20	0.21	0.20	0.23	0.24
Residual Fuel Oil	0.46	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.41
Liquid Fuels and Other Petroleum Subtotal	0.64	0.55	0.56	0.56	0.56	0.59	0.60	0.59	0.63	0.64
Natural Gas	6.42	6.64	6.89	7.14	5.86	6.09	5.97	5.18	5.13	4.99
Steam Coal	20.48	21.00	21.01	21.01	22.57	23.67	25.20	25.07	27.55	29.75
Nuclear Power	8.21	8.31	8.31	8.31	8.90	9.05	9.26	8.72	9.57	10.92
Renewable Energy <sup>15</sup>	3.74	4.48	4.53	4.52	5.41	5.64	5.75	5.77	6.13	6.40
Electricity Imports	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.08	0.07
<b>Total<sup>16</sup></b>	<b>39.68</b>	<b>41.16</b>	<b>41.46</b>	<b>41.72</b>	<b>43.47</b>	<b>45.21</b>	<b>46.96</b>	<b>45.52</b>	<b>49.21</b>	<b>52.90</b>

# Economic Growth Case Comparisons

**Table B2. Energy Consumption by Sector and Source (Continued)**  
(Quadrillion Btu per Year, Unless Otherwise Noted)

Sector and Source	2006	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
<b>Total Energy Consumption</b>										
Liquefied Petroleum Gases	2.65	2.65	2.70	2.76	2.26	2.45	2.68	2.03	2.37	2.75
E85 <sup>8</sup>	0.00	0.00	0.00	0.00	1.07	0.97	0.95	1.53	1.34	1.26
Motor Gasoline <sup>2</sup>	17.62	17.54	17.68	17.84	16.20	16.99	17.78	15.04	16.40	17.83
Jet Fuel <sup>9</sup>	3.16	3.41	3.44	3.47	4.10	4.15	4.13	4.62	4.79	4.83
Kerosene	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.12	0.13	0.13
Distillate Fuel Oil	8.77	8.94	9.15	9.37	9.49	10.20	10.96	10.01	11.51	13.01
Residual Fuel Oil	1.69	1.60	1.60	1.62	1.55	1.58	1.60	1.54	1.60	1.65
Petrochemical Feedstocks	1.41	1.32	1.36	1.41	1.22	1.39	1.57	1.01	1.29	1.60
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum <sup>12</sup>	4.64	4.27	4.40	4.54	4.14	4.38	4.64	4.18	4.56	4.96
Liquid Fuels and Other Petroleum Subtotal	40.06	39.85	40.46	41.12	40.15	42.24	44.43	40.08	43.99	48.01
Natural Gas	20.54	21.68	22.08	22.44	21.10	22.07	22.70	20.00	21.40	22.63
Natural-Gas-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lease and Plant Fuel <sup>6</sup>	1.17	1.20	1.21	1.22	1.22	1.25	1.27	1.23	1.27	1.32
Pipeline Natural Gas	0.59	0.63	0.64	0.65	0.66	0.69	0.71	0.68	0.72	0.76
Natural Gas Subtotal	22.30	23.51	23.93	24.31	22.99	24.01	24.68	21.91	23.39	24.71
Metallurgical Coal	0.60	0.59	0.60	0.61	0.49	0.54	0.58	0.39	0.48	0.57
Other Coal	21.83	22.38	22.41	22.42	23.81	24.96	26.53	26.26	28.82	31.09
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.15	0.34	0.58	0.34	0.55	1.27
Net Coal Coke Imports	0.06	0.03	0.03	0.03	0.03	0.04	0.04	0.02	0.04	0.06
Coal Subtotal	22.50	23.00	23.03	23.06	24.48	25.87	27.74	27.00	29.90	32.99
Nuclear Power	8.21	8.31	8.31	8.31	8.90	9.05	9.26	8.72	9.57	10.92
Biofuels Heat and Coproducts	0.30	0.68	0.67	0.67	1.50	1.49	1.49	2.34	2.31	2.29
Renewable Energy <sup>17</sup>	5.97	6.67	6.76	6.81	7.63	8.01	8.27	7.98	8.66	9.25
Electricity Imports	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.08	0.07
<b>Total</b>	<b>99.52</b>	<b>102.19</b>	<b>103.34</b>	<b>104.46</b>	<b>105.82</b>	<b>110.85</b>	<b>116.04</b>	<b>108.21</b>	<b>118.01</b>	<b>128.38</b>
<b>Energy Use and Related Statistics</b>										
Delivered Energy Use	72.32	74.10	75.08	76.05	76.28	80.18	84.23	77.43	84.86	92.85
Total Energy Use	99.52	102.19	103.34	104.46	105.82	110.85	116.04	108.21	118.01	128.38
Ethanol Consumed in Motor Gasoline and E85	0.47	1.04	1.05	1.05	1.82	1.82	1.82	2.04	2.01	2.01
Population (millions)	300.13	309.46	310.85	312.64	325.45	337.74	351.32	336.65	365.59	396.34
Gross Domestic Product (billion 2000 dollars)	11319	12110	12453	12797	14743	15984	17239	17429	20219	23002
Carbon Dioxide Emissions (million metric tons)	5890.3	5953.4	6010.6	6068.7	6076.9	6384.1	6720.8	6263.6	6851.0	7452.0

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

<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. Excludes ethanol blends (10 percent or less) in motor gasoline.

<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 ethanol and 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 conventional hydroelectric, geothermal, wood and wood waste, biogenic municipal waste, other biomass, wind, photovoltaic and solar thermal sources. Excludes ethanol, net electricity imports, and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

-- = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 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: 2006 consumption based on: Energy Information Administration (EIA), *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2006 population and gross domestic product: Global Insight, *Global Insight Industry and Employment models*, July 2007. 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 runs LM2008.D031608A, AEO2008.D030208F, and HM2008.D031608A.

# Economic Growth Case Comparisons

**Table B3. Energy Prices by Sector and Source**  
(2006 Dollars per Million Btu, Unless Otherwise Noted)

Sector and Source	2006	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
<b>Residential</b>										
Liquefied Petroleum Gases	23.08	25.00	25.21	25.41	23.99	24.23	24.25	25.03	25.43	25.85
Distillate Fuel Oil	17.94	16.74	17.21	17.48	13.96	14.27	14.71	15.20	16.27	17.12
Natural Gas	13.40	11.95	12.15	12.36	11.14	11.39	11.44	12.47	12.91	13.36
Electricity	30.52	30.99	31.37	31.75	29.19	30.20	30.75	29.59	30.63	31.72
<b>Commercial</b>										
Distillate Fuel Oil	14.59	14.78	15.24	15.51	12.88	13.24	13.81	13.96	15.00	16.08
Residual Fuel Oil	8.60	9.95	10.06	10.17	7.73	7.95	8.11	8.52	9.22	9.80
Natural Gas	11.50	10.41	10.59	10.79	9.72	9.91	9.89	11.13	11.43	11.75
Electricity	27.75	27.46	27.89	28.32	24.63	25.64	26.14	25.22	26.17	27.20
<b>Industrial<sup>1</sup></b>										
Liquefied Petroleum Gases	19.71	17.58	17.74	17.93	16.65	16.79	16.71	17.60	17.79	18.16
Distillate Fuel Oil	15.33	15.27	15.72	15.99	14.21	14.62	15.23	15.21	16.26	17.47
Residual Fuel Oil	9.06	10.51	10.86	11.10	7.96	8.29	8.65	8.84	9.62	10.61
Natural Gas <sup>2</sup>	7.66	7.02	7.21	7.41	6.00	6.21	6.20	6.95	7.29	7.65
Metallurgical Coal	3.54	4.06	4.07	4.09	3.38	3.42	3.45	3.54	3.60	3.67
Other Industrial Coal	2.34	2.41	2.42	2.43	2.24	2.28	2.34	2.26	2.33	2.41
Coal to Liquids	--	--	--	--	0.94	1.09	1.27	1.20	1.30	1.39
Electricity	17.97	18.88	19.21	19.56	16.49	17.27	17.59	16.93	17.63	18.24
<b>Transportation</b>										
Liquefied Petroleum Gases <sup>3</sup>	21.72	25.82	26.03	26.24	24.70	24.94	24.95	25.64	26.03	26.44
E85 <sup>4</sup>	24.81	22.26	23.58	23.84	18.66	18.15	19.83	18.85	19.62	21.43
Motor Gasoline <sup>5</sup>	21.19	20.80	21.23	21.47	18.98	19.64	19.96	19.29	20.37	21.58
Jet Fuel <sup>6</sup>	14.83	15.33	15.77	16.03	13.02	13.27	13.54	14.37	15.37	16.36
Distillate Fuel Oil <sup>7</sup>	19.72	19.21	19.68	19.96	17.74	18.26	19.03	18.43	19.59	21.01
Residual Fuel Oil	7.89	10.22	10.53	10.81	8.30	8.69	9.04	9.55	10.39	11.21
Natural Gas <sup>8</sup>	14.28	13.37	13.60	13.83	11.79	12.15	12.32	12.27	12.83	13.45
Electricity	29.73	30.39	30.95	31.46	27.97	29.05	29.40	28.89	29.65	30.46
<b>Electric Power<sup>9</sup></b>										
Distillate Fuel Oil	13.35	13.16	13.62	13.91	10.37	10.69	11.16	11.66	12.71	13.54
Residual Fuel Oil	8.17	9.18	9.45	9.70	7.14	7.50	7.83	8.25	9.04	9.90
Natural Gas	6.87	6.76	6.96	7.17	5.73	5.95	5.93	6.64	6.93	7.27
Steam Coal	1.69	1.83	1.84	1.84	1.69	1.72	1.76	1.72	1.78	1.85
<b>Average Price to All Users<sup>10</sup></b>										
Liquefied Petroleum Gases	20.35	19.13	19.27	19.44	18.53	18.59	18.42	19.77	19.82	20.01
E85 <sup>4</sup>	24.81	22.26	23.58	23.84	18.66	18.15	19.83	18.85	19.62	21.43
Motor Gasoline <sup>5</sup>	21.06	20.79	21.23	21.47	18.98	19.64	19.96	19.29	20.37	21.57
Jet Fuel	14.83	15.33	15.77	16.03	13.02	13.27	13.54	14.37	15.37	16.36
Distillate Fuel Oil	18.56	18.00	18.48	18.77	16.69	17.20	17.92	17.55	18.74	20.15
Residual Fuel Oil	8.21	10.01	10.31	10.57	7.93	8.29	8.62	9.06	9.87	10.71
Natural Gas	9.22	8.55	8.72	8.89	7.80	7.98	7.99	9.03	9.36	9.73
Metallurgical Coal	3.54	4.06	4.07	4.09	3.38	3.42	3.45	3.54	3.60	3.67
Other Coal	1.73	1.87	1.88	1.88	1.72	1.75	1.79	1.74	1.81	1.87
Coal to Liquids	--	--	--	--	0.94	1.09	1.27	1.20	1.30	1.39
Electricity	26.10	26.54	26.90	27.25	24.37	25.23	25.61	25.21	25.93	26.71

## Economic Growth Case Comparisons

**Table B3. Energy Prices by Sector and Source (Continued)**  
(2006 Dollars per Million Btu, Unless Otherwise Noted)

Sector and Source	2006	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
<b>Non-Renewable Energy Expenditures by Sector (billion 2006 dollars)</b>										
Residential .....	225.38	237.66	241.71	245.66	230.03	243.22	253.57	250.85	274.70	299.44
Commercial .....	166.54	170.25	174.38	177.99	176.99	189.37	198.43	206.78	227.37	249.73
Industrial .....	205.11	214.18	224.65	235.03	170.98	193.16	213.17	161.83	203.93	249.45
Transportation .....	542.63	542.10	560.74	574.98	488.82	530.80	570.19	502.22	587.86	684.41
Total Non-Renewable Expenditures .....	1139.66	1164.20	1201.48	1233.66	1066.82	1156.54	1235.36	1121.67	1293.86	1483.04
Transportation Renewable Expenditures .....	0.03	0.07	0.06	0.07	19.95	17.64	18.92	28.91	26.35	26.92
<b>Total Expenditures .....</b>	<b>1139.70</b>	<b>1164.27</b>	<b>1201.54</b>	<b>1233.72</b>	<b>1086.77</b>	<b>1174.18</b>	<b>1254.28</b>	<b>1150.58</b>	<b>1320.22</b>	<b>1509.95</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 2006 are model results and may differ slightly from official EIA data reports.

**Sources:** 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). 2006 residential and commercial natural gas delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2007/04) (Washington, DC, April 2007). 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). 2006 transportation sector natural gas delivered prices are model results. 2006 electric power sector natural gas prices: EIA, *Electric Power Monthly*, DOE/EIA-0226, May 2006 through April 2007. 2006 coal prices based on: EIA, *Quarterly Coal Report, October-December 2006*, DOE/EIA-0121(2006/4Q) (Washington, DC, March 2007) and EIA, AEO2008 National Energy Modeling System run AEO2008.D030208F. 2006 electricity prices: EIA, *Annual Energy Review 2006*, DOE/EIA-0384(2006) (Washington, DC, June 2007). 2006 E85 prices derived from monthly prices in the Clean Cities Alternative Fuel Price Report.

**Projections:** EIA, AEO2008 National Energy Modeling System runs LM2008.D031608A, AEO2008.D030208F, and HM2008.D031608A.

# Economic Growth Case Comparisons

**Table B4. Macroeconomic Indicators**  
(Billion 2000 Chain-Weighted Dollars, Unless Otherwise Noted)

Indicators	2006	Projections								
		2010			2020			2030		
		Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth	Low Economic Growth	Reference	High Economic Growth
<b>Real Gross Domestic Product</b> .....	<b>11319</b>	<b>12110</b>	<b>12453</b>	<b>12797</b>	<b>14743</b>	<b>15984</b>	<b>17239</b>	<b>17429</b>	<b>20219</b>	<b>23002</b>
<b>Components of Real Gross Domestic Product</b>										
Real Consumption .....	8044	8670	8845	9021	10568	11362	12169	12323	13999	15679
Real Investment .....	1920	1763	1939	2114	2314	2614	2914	3000	3743	4477
Real Government Spending .....	1981	2055	2087	2118	2118	2258	2398	2167	2471	2772
Real Exports .....	1304	1784	1797	1809	3059	3387	3720	5218	6191	7170
Real Imports .....	1929	2143	2190	2246	3326	3474	3589	5386	5723	6008
<b>Energy Intensity</b> (thousand Btu per 2000 dollar of GDP)										
Delivered Energy .....	6.39	6.12	6.03	5.94	5.15	5.00	4.87	4.41	4.16	4.01
Total Energy .....	8.79	8.44	8.30	8.16	7.16	6.91	6.71	6.17	5.80	5.55
<b>Price Indices</b>										
GDP Chain-Type Price Index (2000=1.000) ..	1.166	1.274	1.260	1.245	1.642	1.520	1.400	2.122	1.871	1.630
Consumer Price Index (1982-4=1)										
All-Urban .....	2.02	2.22	2.20	2.17	2.86	2.64	2.43	3.72	3.29	2.88
Energy Commodities and Services .....	1.97	2.14	2.15	2.15	2.54	2.43	2.29	3.40	3.14	2.88
Wholesale Price Index (1982=1.00)										
All Commodities .....	1.65	1.82	1.80	1.77	2.15	1.96	1.78	2.64	2.26	1.91
Fuel and Power .....	1.67	1.86	1.88	1.89	2.14	2.04	1.92	2.98	2.75	2.51
<b>Interest Rates (percent, nominal)</b>										
Federal Funds Rate .....	4.96	4.96	4.69	4.40	5.42	4.92	4.45	5.46	4.91	4.37
10-Year Treasury Note .....	4.79	5.56	5.24	4.89	5.99	5.44	4.90	6.08	5.46	4.89
AA Utility Bond Rate .....	5.84	6.84	6.65	6.44	7.52	6.98	6.45	7.76	7.13	6.54
<b>Value of Shipments (billion 2000 dollars)</b>										
Total Industrial .....	5821	5788	5997	6202	6447	7113	7768	6533	7997	9450
Non-manufacturing .....	1531	1324	1419	1515	1427	1619	1814	1440	1715	1988
Manufacturing .....	4290	4464	4577	4687	5020	5493	5953	5092	6283	7462
Energy-Intensive .....	1225	1257	1283	1309	1287	1387	1487	1251	1447	1643
Non-Energy Intensive .....	3065	3207	3295	3378	3733	4107	4466	3842	4836	5819
<b>Population and Employment (millions)</b>										
Population with Armed Forces Overseas ....	300.1	309.5	310.9	312.6	325.4	337.7	351.3	336.7	365.6	396.3
Population (aged 16 and over) .....	235.0	243.5	244.9	246.7	257.6	266.0	275.2	270.4	289.3	309.4
Population, over age 65 .....	37.3	40.3	40.4	40.6	54.0	54.9	55.8	69.3	71.6	74.1
Employment, Nonfarm .....	136.1	137.3	142.4	147.6	143.5	154.5	165.7	152.9	168.1	183.2
Employment, Manufacturing .....	14.2	14.0	14.2	14.3	13.3	13.8	14.2	10.1	11.2	12.0
<b>Key Labor Indicators</b>										
Labor Force (millions) .....	151.4	155.1	156.8	158.3	160.3	165.6	171.6	168.5	177.9	187.6
Non-farm Labor Productivity (1992=1.00) ....	1.35	1.44	1.45	1.47	1.68	1.77	1.87	1.92	2.14	2.37
Unemployment Rate (percent) .....	4.63	5.12	5.03	4.93	4.80	4.62	4.41	4.99	4.80	4.68
<b>Key Indicators for Energy Demand</b>										
Real Disposable Personal Income .....	8397	9284	9472	9661	11888	12654	13436	14627	16246	17874
Housing Starts (millions) .....	1.93	1.42	1.68	1.93	1.39	1.78	2.17	1.15	1.70	2.24
Commercial Floorspace (billion square feet) ..	74.8	78.0	78.8	79.4	85.6	89.3	92.6	93.8	100.8	108.0
Unit Sales of Light-Duty Vehicles (millions) ...	16.50	16.05	16.38	17.09	16.36	17.47	18.88	17.16	19.39	21.86

GDP = Gross domestic product.

Btu = British thermal unit.

**Sources:** 2006: Global Insight, Global Insight Industry and Employment models, July 2007. **Projections:** Energy Information Administration, AEO2008 National Energy Modeling System runs LM2008.D031608A, AEO2008.D030208F, and HM2008.D031608A.