

Appendix B

Economic growth case comparisons

Table B1. Total energy supply, disposition, and price summary
 (quadrillion Btu per year, unless otherwise noted)

Supply, disposition, and prices	2010	Projections								
		2015		2025		2035				
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth
Production										
Crude oil and lease condensate	11.59	13.23	13.23	13.25	13.53	13.77	13.79	12.86	12.89	13.12
Natural gas plant liquids	2.78	3.33	3.33	3.33	3.91	3.93	3.93	3.93	3.94	3.95
Dry natural gas	22.10	24.02	24.22	24.28	26.17	26.91	27.64	27.48	28.60	30.05
Coal ¹	22.06	19.71	20.24	20.79	20.27	22.25	23.65	21.91	24.14	25.33
Nuclear / uranium ²	8.44	8.68	8.68	8.68	9.60	9.60	9.60	9.14	9.28	10.13
Hydropower	2.51	2.89	2.90	2.90	2.95	2.99	3.02	3.00	3.04	3.10
Biomass ³	4.05	4.41	4.45	4.49	6.04	6.26	6.30	8.37	9.07	9.58
Other renewable energy ⁴	1.34	2.08	1.99	2.18	2.21	2.22	2.42	2.44	2.81	3.64
Other ⁵	0.64	0.60	0.60	0.60	0.68	0.69	0.71	0.83	0.91	0.93
Total	75.50	78.96	79.64	80.50	85.36	88.61	91.06	89.95	94.67	99.83
Imports										
Crude oil	20.14	18.34	18.87	19.43	15.20	16.23	17.55	15.30	16.90	18.50
Liquid fuels and other petroleum ⁶	5.02	4.19	4.32	4.45	3.72	4.08	4.40	3.63	4.14	4.75
Natural gas ⁷	3.81	3.67	3.73	3.76	2.61	2.75	2.89	2.74	2.84	2.86
Other imports ⁸	0.52	0.34	0.44	0.47	0.97	1.07	0.95	0.73	0.81	0.96
Total	29.49	26.54	27.37	28.11	22.50	24.14	25.79	22.40	24.69	27.07
Exports										
Liquid fuels and other petroleum ⁹	4.81	4.90	5.00	5.08	4.32	4.46	4.57	4.68	4.95	5.11
Natural gas ¹⁰	1.15	1.93	1.93	1.92	3.55	3.51	3.48	4.29	4.17	4.07
Coal	2.10	2.73	2.73	2.73	2.78	2.82	2.82	3.09	3.13	3.18
Total	8.06	9.57	9.66	9.74	10.66	10.79	10.87	12.06	12.25	12.37
Discrepancy¹¹	-1.23	-0.03	-0.08	-0.09	-0.01	-0.03	-0.06	0.25	0.18	0.15
Consumption										
Liquid fuels and other petroleum ¹²	37.25	36.09	36.72	37.38	34.78	36.58	38.19	35.17	37.70	40.23
Natural gas	24.71	25.73	26.00	26.09	25.21	26.14	27.04	25.93	27.26	28.83
Coal ¹³	20.76	17.17	17.80	18.36	18.23	20.02	21.30	19.16	21.15	22.43
Nuclear / uranium ²	8.44	8.68	8.68	8.68	9.60	9.60	9.60	9.14	9.28	10.13
Hydropower	2.51	2.89	2.90	2.90	2.95	2.99	3.02	3.00	3.04	3.10
Biomass ¹⁴	2.88	3.01	3.04	3.06	3.95	4.17	4.21	4.96	5.44	5.78
Other renewable energy ⁴	1.34	2.08	1.99	2.18	2.21	2.22	2.42	2.44	2.81	3.64
Other ¹⁵	0.29	0.30	0.30	0.30	0.28	0.28	0.28	0.24	0.24	0.25
Total	98.16	95.96	97.43	98.96	97.20	101.99	106.05	100.04	106.93	114.38
Prices (2010 dollars per unit)										
Petroleum (dollars per barrel)										
Low sulfur light crude oil ¹⁶	79.39	116.06	116.91	117.83	130.58	132.56	134.77	142.51	144.98	147.82
Imported crude oil ¹⁶	75.87	113.12	113.97	114.90	118.61	121.21	124.15	130.33	132.95	136.68
Natural gas (dollars per million Btu)										
at Henry hub	4.39	4.06	4.29	4.36	5.10	5.63	6.17	6.60	7.37	7.58
at the wellhead ¹⁷	4.06	3.64	3.84	3.91	4.54	5.00	5.46	5.83	6.48	6.66
Natural gas (dollars per thousand cubic feet)										
at the wellhead ¹⁷	4.16	3.73	3.94	4.00	4.65	5.12	5.59	5.97	6.64	6.82
Coal (dollars per ton)										
at the minemouth ¹⁸	35.61	42.70	42.08	41.92	44.24	44.05	44.48	50.92	50.52	51.36
Coal (dollars per million Btu)										
at the minemouth ¹⁸	1.76	2.11	2.08	2.08	2.24	2.23	2.25	2.57	2.56	2.60
Average end-use ¹⁹	2.38	2.55	2.56	2.57	2.68	2.70	2.73	2.90	2.94	3.03
Average electricity (cents per kilowatthour)	9.8	9.9	9.7	9.6	9.7	9.7	9.9	9.8	10.1	10.5

Table B1. Total energy supply, disposition, and price summary (continued)
 (quadrillion Btu per year, unless otherwise noted)

Supply, disposition, and prices	2010	Projections								
		2015			2025			2035		
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth
Prices (nominal dollars per unit)										
Petroleum (dollars per barrel)										
Low sulfur light crude oil ¹⁶	79.39	127.20	125.97	125.10	197.32	170.09	163.70	313.58	229.55	212.97
Imported crude oil ¹⁶	75.87	123.98	122.81	121.98	179.23	155.52	150.79	286.76	210.51	196.92
Natural gas (dollars per million Btu)										
at Henry hub	4.39	4.45	4.62	4.63	7.70	7.23	7.50	14.52	11.67	10.92
at the wellhead ¹⁷	4.06	3.99	4.14	4.15	6.86	6.42	6.63	12.82	10.26	9.59
Natural gas (dollars per thousand cubic feet)										
at the wellhead ¹⁷	4.16	4.09	4.24	4.25	7.02	6.57	6.79	13.13	10.51	9.82
Coal (dollars per ton)										
at the minemouth ¹⁸	35.61	46.80	45.34	44.50	66.85	56.52	54.03	112.04	80.00	74.00
Coal (dollars per million Btu)										
at the minemouth ¹⁸	1.76	2.31	2.24	2.21	3.39	2.86	2.73	5.64	4.05	3.74
Average end-use ¹⁹	2.38	2.79	2.76	2.73	4.05	3.47	3.32	6.37	4.66	4.36
Average electricity (cents per kilowatthour) ...	9.8	10.9	10.4	10.2	14.7	12.5	12.0	21.6	16.0	15.1

¹Includes waste coal.²These values represent the energy obtained from uranium when it is used in light water reactors. The total energy content of uranium is much larger, but alternative processes are required to take advantage of it.³Includes grid-connected electricity from wood and wood waste; biomass, such as corn, used for liquid fuels production; and non-electric energy demand from wood. Refer to Table A17 for details.⁴Includes 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 data.⁵Includes non-biogenic municipal waste, liquid hydrogen, methanol, and some domestic inputs to refineries.⁶Includes imports of finished petroleum products, unfinished oils, alcohols, ethers, blending components, and renewable fuels such as ethanol.⁷Includes imports of liquefied natural gas that is later re-exported.⁸Includes coal, coal coke (net), and electricity (net). Excludes imports of fuel used in nuclear power plants.⁹Includes crude oil, petroleum products, ethanol, and biodiesel.¹⁰Includes re-exported liquefied natural gas and natural gas used for liquefaction at export terminals.¹¹Balancing item. Includes unaccounted for supply, losses, gains, and net storage withdrawals.¹²Includes petroleum-derived fuels and non-petroleum derived fuels, such as ethanol and biodiesel, and coal-based synthetic liquids. Petroleum coke, which is a solid, is included. Also included are natural gas plant liquids and crude oil consumed as a fuel. Refer to Table A17 for detailed renewable liquid fuels consumption.¹³Excludes coal converted to coal-based synthetic liquids and natural gas.¹⁴Includes 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.¹⁵Includes non-biogenic municipal waste, liquid hydrogen, and net electricity imports.¹⁶Weighted average price delivered to U.S. refiners.¹⁷Represents lower 48 onshore and offshore supplies.¹⁸Includes reported prices for both open market and captive mines.¹⁹Prices weighted by consumption; weighted average excludes residential and commercial prices, and export free-alongside-ship (f.a.s.) prices.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Data for 2010 are model results and may differ slightly from official EIA data reports.

Sources: 2010 natural gas supply values and natural gas wellhead price: U.S. Energy Information Administration (EIA), *Natural Gas Monthly*, DOE/EIA-0130(2011/07) (Washington, DC, July 2011). 2010 coal minemouth and delivered coal prices: EIA, *Annual Coal Report 2010*, DOE/EIA-0584(2010) (Washington, DC, November 2011). 2010 petroleum supply values: EIA, *Petroleum Supply Annual 2010*, DOE/EIA-0340(2010)/1 (Washington, DC, July 2011). 2010 low sulfur light crude oil price: EIA, Form EIA-856, "Monthly Foreign Crude Oil Acquisition Report." Other 2010 coal values: *Quarterly Coal Report, October-December 2010*, DOE/EIA-0121(2010/4Q) (Washington, DC, May 2011). Other 2010 values: EIA, *Annual Energy Review 2010*, DOE/EIA-0384(2010) (Washington, DC, October 2011). **Projections:** EIA, AEO2012 National Energy Modeling System runs LM2012.D022412A, REF2012.D020112C, and HM2012.D022412A.

Table B2. Energy consumption by sector and source
 (quadrillion Btu per year, unless otherwise noted)

Sector and source	2010	Projections								
		2015			2025			2035		
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth
Energy consumption										
Residential										
Liquefied petroleum gases	0.56	0.51	0.51	0.51	0.49	0.50	0.52	0.48	0.51	0.54
Kerosene	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Distillate fuel oil	0.63	0.55	0.55	0.55	0.43	0.43	0.43	0.35	0.35	0.35
Liquid fuels and other petroleum subtotal ..	1.22	1.08	1.08	1.08	0.94	0.95	0.97	0.85	0.87	0.91
Natural gas	5.06	4.96	4.97	5.00	4.77	4.88	5.04	4.50	4.76	5.08
Coal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Renewable energy ¹	0.42	0.42	0.43	0.43	0.42	0.43	0.45	0.41	0.43	0.47
Electricity	4.95	4.68	4.75	4.82	4.97	5.23	5.58	5.35	5.86	6.57
Delivered energy	11.66	11.15	11.24	11.34	11.11	11.51	12.05	11.12	11.93	13.04
Electricity related losses	10.39	9.43	9.58	9.75	10.03	10.52	11.17	10.47	11.35	12.72
Total	22.05	20.59	20.81	21.09	21.13	22.02	23.22	21.59	23.28	25.76
Commercial										
Liquefied petroleum gases	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16
Motor gasoline ²	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06
Kerosene	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Distillate fuel oil	0.43	0.35	0.35	0.35	0.33	0.33	0.33	0.32	0.32	0.32
Residual fuel oil	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Liquid fuels and other petroleum subtotal ..	0.72	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.63
Natural gas	3.28	3.43	3.41	3.42	3.56	3.53	3.51	3.70	3.69	3.71
Coal	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Renewable energy ³	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Electricity	4.54	4.57	4.59	4.61	5.11	5.16	5.22	5.70	5.80	5.89
Delivered energy	8.70	8.79	8.80	8.81	9.46	9.48	9.53	10.19	10.28	10.39
Electricity related losses	9.52	9.21	9.27	9.32	10.30	10.38	10.44	11.15	11.23	11.40
Total	18.22	18.00	18.06	18.13	19.76	19.86	19.97	21.34	21.50	21.79
Industrial⁴										
Liquefied petroleum gases	2.00	1.80	1.83	1.83	2.06	2.17	2.18	2.01	2.15	2.20
Motor gasoline ²	0.25	0.27	0.28	0.29	0.27	0.30	0.33	0.26	0.30	0.33
Distillate fuel oil	1.16	1.16	1.25	1.33	1.04	1.19	1.33	1.01	1.18	1.35
Residual fuel oil	0.12	0.09	0.09	0.09	0.08	0.08	0.09	0.08	0.08	0.09
Petrochemical feedstocks	0.94	1.00	1.01	1.01	1.22	1.29	1.29	1.21	1.30	1.33
Other petroleum ⁵	3.59	3.29	3.44	3.60	2.81	3.11	3.45	2.80	3.19	3.60
Liquid fuels and other petroleum subtotal ..	8.05	7.61	7.89	8.15	7.48	8.13	8.68	7.36	8.21	8.89
Natural gas	6.76	7.04	7.19	7.34	6.81	7.32	7.62	6.49	7.18	7.84
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 ⁶	1.37	1.42	1.43	1.43	1.54	1.57	1.60	1.57	1.63	1.71
Natural gas subtotal	8.14	8.46	8.62	8.77	8.35	8.89	9.22	8.06	8.81	9.55
Metallurgical coal	0.55	0.55	0.57	0.59	0.41	0.49	0.54	0.34	0.43	0.53
Other industrial coal	1.01	1.01	1.03	1.05	1.02	1.08	1.12	1.01	1.08	1.14
Coal-to-liquids heat and power	0.00	0.00	0.00	0.00	0.11	0.36	0.37	0.31	0.60	0.61
Net coal coke imports	-0.01	-0.01	-0.01	-0.00	-0.03	-0.03	-0.03	-0.05	-0.06	-0.07
Coal subtotal	1.56	1.55	1.59	1.63	1.52	1.90	2.00	1.60	2.06	2.21
Biofuels heat and coproducts	0.84	0.80	0.81	0.82	1.26	1.27	1.27	2.39	2.57	2.69
Renewable energy ⁷	1.50	1.59	1.61	1.63	1.67	1.82	1.91	1.74	1.95	2.10
Electricity	3.28	3.34	3.44	3.53	3.22	3.52	3.75	3.01	3.33	3.67
Delivered energy	23.37	23.35	23.96	24.53	23.49	25.53	26.83	24.17	26.94	29.11
Electricity related losses	6.89	6.73	6.94	7.15	6.50	7.09	7.50	5.89	6.46	7.10
Total	30.26	30.08	30.90	31.68	29.99	32.61	34.33	30.06	33.39	36.21

Table B2. Energy consumption by sector and source (continued)
 (quadrillion Btu per year, unless otherwise noted)

Sector and source	2010	Projections									
		2015			2025			2035			
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	
Transportation											
Liquefied petroleum gases	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.05	0.06	
E85 ⁸	0.00	0.01	0.01	0.01	0.40	0.30	0.21	1.14	1.22	1.22	
Motor gasoline ²	16.91	16.00	16.13	16.29	14.26	14.90	15.49	13.43	14.53	15.38	
Jet fuel ⁹	3.07	3.01	3.03	3.04	3.15	3.19	3.24	3.25	3.33	3.42	
Distillate fuel oil ¹⁰	5.77	6.35	6.55	6.77	6.50	7.03	7.51	7.06	7.44	8.27	
Residual fuel oil	0.90	0.91	0.91	0.91	0.92	0.93	0.93	0.93	0.94	0.95	
Other petroleum ¹¹	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.18	
Liquid fuels and other petroleum subtotal ..	26.88	26.48	26.83	27.22	25.43	26.57	27.60	26.03	27.67	29.47	
Pipeline fuel natural gas	0.65	0.68	0.68	0.69	0.65	0.67	0.69	0.66	0.69	0.74	
Compressed / liquefied natural gas	0.04	0.06	0.06	0.06	0.11	0.11	0.12	0.16	0.16	0.17	
Liquid hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Electricity	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.07	0.07	0.08	
Delivered energy	27.59	27.24	27.60	28.00	26.24	27.40	28.45	26.92	28.60	30.46	
Electricity related losses	0.05	0.05	0.05	0.05	0.08	0.08	0.09	0.13	0.14	0.15	
Total	27.63	27.30	27.65	28.05	26.32	27.49	28.54	27.05	28.75	30.62	
Delivered energy consumption for all sectors											
Liquefied petroleum gases	2.75	2.49	2.51	2.52	2.75	2.86	2.89	2.69	2.86	2.95	
E85 ⁸	0.00	0.01	0.01	0.01	0.40	0.30	0.21	1.14	1.22	1.22	
Motor gasoline ²	17.21	16.32	16.46	16.63	14.58	15.25	15.87	13.75	14.88	15.77	
Jet fuel ⁹	3.07	3.01	3.03	3.04	3.15	3.19	3.24	3.25	3.33	3.42	
Kerosene	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Distillate fuel oil	7.99	8.41	8.69	9.00	8.30	8.99	9.61	8.74	9.29	10.29	
Residual fuel oil	1.11	1.07	1.08	1.08	1.08	1.09	1.10	1.09	1.11	1.12	
Petrochemical feedstocks	0.94	1.00	1.01	1.01	1.22	1.29	1.29	1.21	1.30	1.33	
Other petroleum ¹²	3.76	3.45	3.61	3.76	2.97	3.27	3.62	2.97	3.36	3.77	
Liquid fuels and other petroleum subtotal ..	36.87	35.80	36.43	37.07	34.48	36.28	37.87	34.86	37.38	39.90	
Natural gas	15.15	15.49	15.64	15.83	15.25	15.85	16.29	14.85	15.79	16.80	
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 ¹⁰	1.37	1.42	1.43	1.43	1.54	1.57	1.60	1.57	1.63	1.71	
Pipeline natural gas	0.65	0.68	0.68	0.69	0.65	0.67	0.69	0.66	0.69	0.74	
Natural gas subtotal	17.17	17.58	17.75	17.94	17.44	18.09	18.58	17.08	18.11	19.26	
Metallurgical coal	0.55	0.55	0.57	0.59	0.41	0.49	0.54	0.34	0.43	0.53	
Other coal	1.08	1.07	1.09	1.11	1.08	1.14	1.18	1.07	1.15	1.21	
Coal-to-liquids heat and power	0.00	0.00	0.00	0.00	0.11	0.36	0.37	0.31	0.60	0.61	
Net coal coke imports	-0.01	-0.01	-0.01	-0.00	-0.03	-0.03	-0.03	-0.05	-0.06	-0.07	
Coal subtotal	1.62	1.62	1.65	1.70	1.58	1.96	2.06	1.67	2.12	2.28	
Biofuels heat and coproducts	0.84	0.80	0.81	0.82	1.26	1.27	1.27	2.39	2.57	2.69	
Renewable energy ¹³	2.03	2.12	2.15	2.17	2.20	2.36	2.47	2.25	2.50	2.68	
Liquid hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Electricity	12.79	12.61	12.81	12.98	13.34	13.96	14.60	14.13	15.06	16.20	
Delivered energy	71.32	70.54	71.59	72.69	70.30	73.92	76.86	72.39	77.75	83.01	
Electricity related losses	26.84	25.42	25.84	26.27	26.91	28.07	29.20	27.65	29.18	31.37	
Total	98.16	95.96	97.43	98.96	97.20	101.99	106.05	100.04	106.93	114.38	
Electric power¹⁴											
Distillate fuel oil	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	
Residual fuel oil	0.30	0.21	0.21	0.22	0.21	0.22	0.23	0.22	0.23	0.24	
Liquid fuels and other petroleum subtotal ..	0.38	0.29	0.29	0.30	0.30	0.31	0.32	0.31	0.32	0.34	
Natural gas	7.54	8.15	8.25	8.15	7.77	8.04	8.46	8.84	9.16	9.58	
Steam coal	19.13	15.56	16.15	16.67	16.65	18.06	19.24	17.50	19.03	20.15	
Nuclear / uranium ¹⁵	8.44	8.68	8.68	8.68	9.60	9.60	9.60	9.14	9.28	10.13	
Renewable energy ¹⁶	3.85	5.05	4.96	5.15	5.66	5.75	5.91	5.75	6.22	7.14	
Electricity imports	0.09	0.10	0.10	0.10	0.08	0.08	0.08	0.04	0.04	0.04	
Total ¹⁷	39.63	38.03	38.64	39.25	40.25	42.03	43.80	41.78	44.24	47.57	

Table B2. Energy consumption by sector and source (continued)
 (quadrillion Btu per year, unless otherwise noted)

Sector and source	2010	Projections								
		2015			2025			2035		
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth
Total energy consumption										
Liquefied petroleum gases	2.75	2.49	2.51	2.52	2.75	2.86	2.89	2.69	2.86	2.95
E85 ⁸	0.00	0.01	0.01	0.01	0.40	0.30	0.21	1.14	1.22	1.22
Motor gasoline ²	17.21	16.32	16.46	16.63	14.58	15.25	15.87	13.75	14.88	15.77
Jet fuel ⁹	3.07	3.01	3.03	3.04	3.15	3.19	3.24	3.25	3.33	3.42
Kerosene	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Distillate fuel oil	8.07	8.50	8.78	9.08	8.39	9.07	9.70	8.83	9.38	10.38
Residual fuel oil	1.41	1.28	1.29	1.30	1.29	1.31	1.33	1.31	1.34	1.36
Petrochemical feedstocks	0.94	1.00	1.01	1.01	1.22	1.29	1.29	1.21	1.30	1.33
Other petroleum ¹²	3.76	3.45	3.61	3.76	2.97	3.27	3.62	2.97	3.36	3.77
Liquid fuels and other petroleum subtotal ..	37.25	36.09	36.72	37.38	34.78	36.58	38.19	35.17	37.70	40.23
Natural gas	22.69	23.64	23.89	23.97	23.02	23.89	24.74	23.70	24.94	26.38
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 ⁶	1.37	1.42	1.43	1.43	1.54	1.57	1.60	1.57	1.63	1.71
Pipeline natural gas	0.65	0.68	0.68	0.69	0.65	0.67	0.69	0.66	0.69	0.74
Natural gas subtotal ..	24.71	25.73	26.00	26.09	25.21	26.14	27.04	25.93	27.26	28.83
Metallurgical coal	0.55	0.55	0.57	0.59	0.41	0.49	0.54	0.34	0.43	0.53
Other coal	20.21	16.63	17.24	17.78	17.73	19.20	20.42	18.57	20.18	21.36
Coal-to-liquids heat and power	0.00	0.00	0.00	0.00	0.11	0.36	0.37	0.31	0.60	0.61
Net coal coke imports	-0.01	-0.01	-0.01	-0.00	-0.03	-0.03	-0.03	-0.05	-0.06	-0.07
Coal subtotal	20.76	17.17	17.80	18.36	18.23	20.02	21.30	19.16	21.15	22.43
Nuclear / uranium ¹⁵	8.44	8.68	8.68	8.68	9.60	9.60	9.60	9.14	9.28	10.13
Biofuels heat and coproducts	0.84	0.80	0.81	0.82	1.26	1.27	1.27	2.39	2.57	2.69
Renewable energy ¹⁸	5.88	7.18	7.11	7.33	7.85	8.11	8.38	8.00	8.71	9.82
Liquid hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity imports	0.09	0.10	0.10	0.10	0.08	0.08	0.08	0.04	0.04	0.04
Total	98.16	95.96	97.43	98.96	97.20	101.99	106.05	100.04	106.93	114.38
Energy use and related statistics										
Delivered energy use	71.32	70.54	71.59	72.69	70.30	73.92	76.86	72.39	77.75	83.01
Total energy use	98.16	95.96	97.43	98.96	97.20	101.99	106.05	100.04	106.93	114.38
Ethanol consumed in motor gasoline and E85	1.11	1.21	1.22	1.23	1.55	1.55	1.54	1.99	2.15	2.23
Population (millions)	310.83	325.23	326.16	327.19	354.23	358.06	362.48	382.76	390.09	398.74
Gross domestic product (billion 2005 dollars)	13088	14401	14803	15235	17676	19185	20538	21630	24539	27084
Carbon dioxide emissions (million metric tons)	5633.6	5298.2	5407.2	5503.9	5226.8	5552.5	5823.7	5355.8	5757.9	6117.5

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

²Includes ethanol (blends of 15 percent or less) and ethers blended into gasoline.

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

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

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

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

⁷Includes consumption of energy produced from hydroelectric, wood and wood waste, municipal waste, and other biomass sources. Excludes ethanol blends (15 percent or less) in motor gasoline.

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

⁹Includes only kerosene type.

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

¹¹Includes aviation gasoline and lubricants.

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

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

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

¹⁵These values represent the energy obtained from uranium when it is used in light water reactors. The total energy content of uranium is much larger, but alternative processes are required to take advantage of it.

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

¹⁷Includes non-biogenic municipal waste not included above.

¹⁸Includes 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 water heaters.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Data for 2010 are model results and may differ slightly from official EIA data reports.

Sources: 2010 consumption based on: U.S. Energy Information Administration (EIA), *Annual Energy Review 2010*, DOE/EIA-0384(2010) (Washington, DC, October 2011). 2010 population and gross domestic product: IHS Global Insight Industry and Employment models, August 2011. 2010 carbon dioxide emissions: EIA, *Monthly Energy Review*, October 2011 DOE/EIA-0035(2011/10) (Washington, DC, October 2011). **Projections:** EIA, AEO2012 National Energy Modeling System runs LM2012.D022412A, REF2012.D020112C, and HM2012.D022412A.

Table B3. Energy prices by sector and source
 (2010 dollars per million Btu, unless otherwise noted)

Sector and source	2010	Projections									
		2015			2025			2035			
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	
Residential											
Liquefied petroleum gases	27.02	30.48	30.70	30.86	31.69	32.27	32.91	33.94	34.64	35.27	
Distillate fuel oil	21.21	27.00	27.26	27.52	29.17	30.15	30.64	32.01	32.73	33.99	
Natural gas	11.08	10.10	10.31	10.39	11.46	12.03	12.61	13.16	13.98	14.38	
Electricity	33.69	35.59	34.59	34.31	34.30	34.08	34.20	34.14	34.58	35.27	
Commercial											
Liquefied petroleum gases	23.52	27.21	27.42	27.57	28.39	28.97	29.59	30.62	31.30	31.89	
Distillate fuel oil	20.77	23.72	23.98	24.23	25.89	26.86	27.30	28.58	29.18	30.43	
Residual fuel oil	11.07	16.02	16.18	16.35	17.82	18.24	18.62	18.61	18.90	19.61	
Natural gas	9.10	8.40	8.60	8.67	9.51	10.02	10.52	10.92	11.64	11.91	
Electricity	29.73	29.65	29.03	28.97	28.81	29.00	29.51	28.42	29.48	30.79	
Industrial¹											
Liquefied petroleum gases	21.80	27.12	27.43	27.66	28.44	29.24	30.12	31.26	32.18	32.98	
Distillate fuel oil	21.32	23.95	24.20	24.45	26.23	27.22	27.61	28.93	29.53	30.79	
Residual fuel oil	10.92	18.95	19.21	19.45	20.54	21.23	21.59	21.12	21.65	22.44	
Natural gas ²	5.51	4.68	4.88	4.94	5.58	6.04	6.51	6.89	7.54	7.74	
Metallurgical coal	5.84	7.30	7.22	7.20	8.24	8.11	8.08	9.24	9.11	9.11	
Other industrial coal	2.71	3.27	3.27	3.27	3.38	3.38	3.39	3.61	3.64	3.69	
Coal to liquids	--	1.27	1.26	1.26	2.27	2.08	2.14	2.34	2.38	2.42	
Electricity	19.63	19.06	18.91	18.94	19.21	19.60	20.15	19.63	20.78	22.00	
Transportation											
Liquefied petroleum gases ³	26.88	31.71	31.93	32.09	32.80	33.38	34.04	35.02	35.74	36.31	
E85 ⁴	25.21	28.85	29.03	29.26	27.92	28.81	31.30	31.02	31.96	33.04	
Motor gasoline ⁵	22.70	29.09	29.26	29.49	30.92	32.10	32.42	32.33	33.61	34.78	
Jet fuel ⁶	16.22	23.48	23.74	24.02	25.61	26.45	26.99	28.41	29.13	30.25	
Diesel fuel (distillate fuel oil) ⁷	21.87	27.28	27.56	27.83	29.18	30.42	30.85	31.53	32.40	33.80	
Residual fuel oil	10.42	17.96	18.32	18.61	19.74	20.62	20.82	20.50	20.95	21.94	
Natural gas ⁸	13.20	12.17	12.40	12.51	12.51	13.29	13.86	13.42	14.51	14.87	
Electricity	32.99	30.67	30.50	30.54	31.37	31.53	32.45	32.36	33.82	35.11	
Electric power⁹											
Distillate fuel oil	18.73	22.50	22.77	23.04	24.44	25.35	25.88	27.17	27.80	29.02	
Residual fuel oil	11.89	22.67	23.00	23.03	24.55	25.40	25.41	25.25	25.72	26.49	
Natural gas	5.14	4.36	4.55	4.61	5.15	5.60	6.10	6.55	7.21	7.40	
Steam coal	2.26	2.33	2.35	2.37	2.50	2.54	2.56	2.75	2.80	2.87	
Average price to all users¹⁰											
Liquefied petroleum gases	17.28	22.78	22.99	23.18	23.62	24.19	24.91	25.96	26.63	27.37	
E85 ⁴	25.21	28.85	29.03	29.26	27.92	28.81	31.30	31.02	31.96	33.04	
Motor gasoline ⁵	22.59	29.09	29.26	29.49	30.91	32.10	32.42	32.33	33.61	34.78	
Jet fuel	16.22	23.48	23.74	24.02	25.61	26.45	26.99	28.41	29.13	30.25	
Distillate fuel oil	21.65	26.61	26.87	27.14	28.65	29.81	30.23	31.09	31.91	33.27	
Residual fuel oil	10.82	18.67	19.01	19.27	20.46	21.31	21.53	21.22	21.68	22.64	
Natural gas	7.16	6.27	6.45	6.52	7.29	7.74	8.22	8.63	9.30	9.53	
Metallurgical coal	5.84	7.30	7.22	7.20	8.24	8.11	8.08	9.24	9.11	9.11	
Other coal	2.29	2.40	2.41	2.43	2.56	2.59	2.62	2.80	2.85	2.92	
Coal to liquids	--	1.27	1.26	1.26	2.27	2.08	2.14	2.34	2.38	2.42	
Electricity	28.68	29.05	28.38	28.23	28.55	28.54	28.90	28.73	29.56	30.64	
Non-renewable energy expenditures by sector (billion 2010 dollars)											
Residential	251.69	247.63	246.72	248.83	253.92	266.75	285.47	270.07	298.72	336.43	
Commercial	179.08	179.38	177.92	178.42	197.28	201.89	208.21	220.10	231.98	244.34	
Industrial	198.98	214.83	223.88	231.79	232.07	261.92	285.16	242.72	282.31	317.58	
Transportation	573.78	731.18	746.84	764.56	736.46	803.52	848.96	777.83	856.65	950.17	
Total non-renewable expenditures	1203.54	1373.02	1395.36	1423.60	1419.73	1534.08	1627.80	1510.72	1669.66	1848.51	
Transportation renewable expenditures	0.08	0.24	0.25	0.26	11.22	8.74	6.44	35.33	38.86	40.34	
Total expenditures	1203.62	1373.26	1395.61	1423.86	1430.95	1542.81	1634.24	1546.05	1708.52	1888.85	

Table B3. Energy prices by sector and source (continued)
 (nominal dollars per million Btu, unless otherwise noted)

Sector and source	2010	Projections								
		2015			2025			2035		
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth
Residential										
Liquefied petroleum gases	27.02	33.41	33.08	32.76	47.89	41.41	39.98	74.69	54.86	50.81
Distillate fuel oil	21.21	29.60	29.38	29.22	44.08	38.68	37.22	70.42	51.82	48.97
Natural gas	11.08	11.07	11.11	11.03	17.31	15.43	15.32	28.95	22.14	20.72
Electricity	33.69	39.01	37.27	36.43	51.84	43.72	41.53	75.12	54.76	50.81
Commercial										
Liquefied petroleum gases	23.52	29.82	29.54	29.27	42.91	37.17	35.94	67.37	49.56	45.95
Distillate fuel oil	20.77	26.00	25.83	25.73	39.13	34.47	33.15	62.88	46.20	43.85
Residual fuel oil	11.07	17.55	17.43	17.36	26.93	23.41	22.61	40.96	29.93	28.25
Natural gas	9.10	9.21	9.27	9.21	14.37	12.86	12.78	24.03	18.43	17.16
Electricity	29.73	32.49	31.28	30.75	43.53	37.21	35.84	62.54	46.67	44.37
Industrial¹										
Liquefied petroleum gases	21.80	29.72	29.56	29.37	42.98	37.51	36.59	68.79	50.95	47.52
Distillate fuel oil	21.32	26.25	26.08	25.96	39.64	34.93	33.54	63.67	46.76	44.36
Residual fuel oil	10.92	20.77	20.70	20.64	31.03	27.24	26.22	46.48	34.28	32.33
Natural gas ²	5.51	5.13	5.26	5.25	8.43	7.75	7.91	15.15	11.93	11.15
Metallurgical coal	5.84	8.00	7.78	7.64	12.45	10.40	9.81	20.34	14.42	13.13
Other industrial coal	2.71	3.59	3.52	3.47	5.11	4.34	4.12	7.95	5.77	5.32
Coal to liquids	--	1.39	1.36	1.34	3.42	2.67	2.60	5.15	3.78	3.49
Electricity	19.63	20.89	20.38	20.11	29.03	25.15	24.47	43.20	32.90	31.70
Transportation										
Liquefied petroleum gases ³	26.88	34.76	34.41	34.07	49.57	42.83	41.35	77.05	56.59	52.31
E85 ⁴	25.21	31.62	31.28	31.06	42.19	36.97	38.02	68.26	50.61	47.60
Motor gasoline ⁵	22.70	31.88	31.53	31.31	46.72	41.19	39.38	71.14	53.22	50.11
Jet fuel ⁶	16.22	25.74	25.58	25.50	38.70	33.94	32.78	62.51	46.12	43.58
Diesel fuel (distillate fuel oil) ⁷	21.87	29.90	29.69	29.55	44.10	39.03	37.47	69.37	51.29	48.70
Residual fuel oil	10.42	19.69	19.74	19.76	29.83	26.45	25.28	45.11	33.18	31.60
Natural gas ⁸	13.20	13.34	13.36	13.29	18.91	17.05	16.84	29.54	22.97	21.42
Electricity	32.99	33.62	32.86	32.42	47.41	40.46	39.41	71.19	53.55	50.59
Electric power⁹										
Distillate fuel oil	18.73	24.66	24.53	24.46	36.93	32.52	31.43	59.79	44.02	41.80
Residual fuel oil	11.89	24.85	24.78	24.45	37.10	32.59	30.87	55.56	40.73	38.16
Natural gas	5.14	4.78	4.90	4.90	7.78	7.19	7.41	14.41	11.42	10.66
Steam coal	2.26	2.56	2.53	2.51	3.78	3.25	3.12	6.05	4.43	4.13

Table B3. Energy prices by sector and source (continued)
 (nominal dollars per million Btu, unless otherwise noted)

Sector and source	2010	Projections								
		2015			2025			2035		
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth
Average price to all users¹⁰										
Liquefied petroleum gases	17.28	24.97	24.78	24.61	35.69	31.04	30.26	57.13	42.17	39.44
E85 ⁴	25.21	31.62	31.28	31.06	42.19	36.97	38.02	68.26	50.61	47.60
Motor gasoline ⁵	22.59	31.88	31.53	31.31	46.72	41.19	39.38	71.14	53.22	50.11
Jet fuel	16.22	25.74	25.58	25.50	38.70	33.94	32.78	62.51	46.12	43.58
Distillate fuel oil	21.65	29.16	28.96	28.81	43.29	38.24	36.72	68.42	50.52	47.93
Residual fuel oil	10.82	20.46	20.48	20.46	30.92	27.34	26.15	46.69	34.33	32.61
Natural gas	7.16	6.87	6.95	6.92	11.02	9.93	9.98	18.98	14.73	13.73
Metallurgical coal	5.84	8.00	7.78	7.64	12.45	10.40	9.81	20.34	14.42	13.13
Other coal	2.29	2.63	2.60	2.58	3.87	3.32	3.18	6.17	4.51	4.20
Coal to liquids	--	1.39	1.36	1.34	3.42	2.67	2.60	5.15	3.78	3.49
Electricity	28.68	31.84	30.58	29.97	43.14	36.62	35.11	63.22	46.80	44.14
Non-renewable energy expenditures by sector (billion nominal dollars)										
Residential	251.69	271.41	265.85	264.18	383.71	342.26	346.74	594.24	472.99	484.70
Commercial	179.08	196.61	191.71	189.42	298.11	259.04	252.89	484.30	367.31	352.03
Industrial	198.98	235.47	241.24	246.08	350.69	336.06	346.35	534.08	447.01	457.54
Transportation	573.78	801.41	804.75	811.72	1112.90	1030.98	1031.15	1711.49	1356.41	1368.93
Total non-renewable expenditures	1203.54	1504.89	1503.55	1511.41	2145.42	1968.35	1977.13	3324.10	2643.72	2663.20
Transportation renewable expenditures	0.08	0.27	0.27	0.27	16.95	11.21	7.82	77.73	61.53	58.11
Total expenditures	1203.62	1505.16	1503.82	1511.69	2162.37	1979.56	1984.95	3401.83	2705.26	2721.31

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

²Excludes use for lease and plant fuel.

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

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

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

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

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

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

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

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

Btu = British thermal unit.

-- = Not applicable.

Note: Data for 2010 are model results and may differ slightly from official EIA data reports.

Sources: 2010 prices for motor gasoline, distillate fuel oil, and jet fuel are based on prices in the U.S. Energy Information Administration (EIA), *Petroleum Marketing Annual* 2009, DOE/EIA-0487(2009) (Washington, DC, August 2010). 2010 residential and commercial natural gas delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2011/07) (Washington, DC, July 2011). 2010 industrial natural gas delivered prices are estimated based on: EIA, *Manufacturing Energy Consumption Survey* and industrial and wellhead prices from the *Natural Gas Annual 2009*, DOE/EIA-0131(2009) (Washington, DC, December 2010) and the *Natural Gas Monthly*, DOE/EIA-0130(2011/07) (Washington, DC, July 2011). 2010 transportation sector natural gas delivered prices are model results. 2010 electric power sector distillate and residual fuel oil prices: EIA, *Monthly Energy Review*, DOE/EIA-0035(2011/09) (Washington, DC, September 2010). 2010 electric power sector natural gas prices: EIA, *Electric Power Monthly*, DOE/EIA-0226, April 2010 and April 2011, Table 4.2, and EIA, *State Energy Data Report 2009*, DOE/EIA-0214(2009) (Washington, DC, June 2011). 2010 coal prices based on: EIA, *Quarterly Coal Report, October–December 2010*, DOE/EIA-0121(2010/4Q) (Washington, DC, May 2011) and EIA, AEO2012 National Energy Modeling System run REF2012.D020112C. 2010 electricity prices: EIA, *Annual Energy Review 2010*, DOE/EIA-0384(2010) (Washington, DC, October 2011). 2010 E85 prices derived from monthly prices in the Clean Cities Alternative Fuel Price Report. **Projections:** EIA, AEO2012 National Energy Modeling System runs LM2012.D022412A, REF2012.D020112C, and HM2012.D022412A.

Table B4. Macroeconomic indicators

(billion 2005 chain-weighted dollars, unless otherwise noted)

Indicators	2010	Projections									
		2015				2025				2035	
		Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	Low economic growth	Reference	High economic growth	
Real gross domestic product	13088	14401	14803	15235	17676	19185	20538	21630	24539	27084	
Components of real gross domestic product											
Real consumption	9221	10007	10218	10510	11874	12697	13606	14594	16220	17889	
Real investment	1715	2234	2457	2675	2956	3472	3982	3929	4836	5651	
Real government spending	2557	2322	2355	2389	2420	2525	2601	2619	2818	2944	
Real exports	1663	2243	2289	2322	3828	4235	4558	5846	6953	7979	
Real imports	2085	2370	2463	2596	3258	3516	3909	5020	5690	6596	
Energy intensity											
(thousand Btu per 2005 dollar of GDP)											
Delivered energy	5.45	4.90	4.84	4.77	3.98	3.85	3.74	3.35	3.17	3.06	
Total energy	7.50	6.66	6.58	6.50	5.50	5.32	5.16	4.63	4.36	4.22	
Price indices											
GDP chain-type price index (2005=1.00) ...	1.110	1.217	1.196	1.178	1.677	1.424	1.348	2.442	1.758	1.599	
Consumer price index (1982-4=1)											
All-urban	2.18	2.47	2.42	2.36	3.53	2.95	2.78	5.38	3.72	3.36	
Energy commodities and services	2.12	2.67	2.62	2.59	3.82	3.36	3.20	5.83	4.37	4.07	
Wholesale price index (1982=1.00)											
All commodities	1.85	2.15	2.10	2.02	2.96	2.39	2.25	4.46	2.81	2.47	
Fuel and power	1.86	2.31	2.29	2.27	3.41	3.01	2.92	5.44	4.12	3.85	
Metals and metal products	2.08	2.45	2.43	2.45	2.85	2.57	2.53	3.39	2.64	2.56	
Industrial commodities excluding energy ...	1.83	2.08	2.04	2.02	2.63	2.22	2.12	3.47	2.43	2.24	
Interest rates (percent, nominal)											
Federal funds rate	0.17	3.31	3.26	2.50	5.75	4.29	3.58	7.56	4.30	3.59	
10-year treasury note	3.21	6.62	4.67	4.09	8.03	5.06	4.49	8.22	5.18	4.47	
AA utility bond rate	5.24	9.31	6.74	5.73	11.61	7.17	6.18	12.74	7.56	6.12	
Value of shipments (billion 2005 dollars)											
Service sectors	20602	22047	22469	22970	26671	28029	29342	31392	33430	35331	
Total industrial	5838	6407	6730	7072	7109	7973	8737	7606	8692	9954	
Non-manufacturing	1578	1702	1873	2065	1885	2228	2554	2024	2407	2823	
Manufacturing	4260	4705	4857	5008	5224	5745	6183	5583	6285	7131	
Energy-intensive	1595	1633	1664	1692	1781	1901	1971	1854	2034	2155	
Non-energy-intensive	2664	3072	3194	3316	3443	3844	4212	3729	4251	4976	
Total shipments	26440	28454	29199	30042	33780	36002	38079	38998	42122	45285	
Population and employment (millions)											
Population with armed forces overseas	310.8	325.2	326.2	327.2	354.2	358.1	362.5	382.8	390.1	398.7	
Population, aged 16 and over	244.3	256.0	256.5	257.2	279.9	282.6	285.8	304.2	309.6	316.0	
Population, over age 65	40.4	46.7	47.1	47.1	63.4	64.2	64.4	76.9	77.7	78.3	
Employment, nonfarm	129.8	138.3	139.4	142.7	150.4	154.2	160.5	158.9	166.8	173.4	
Employment, manufacturing	11.5	11.8	12.1	12.3	11.0	11.4	11.9	9.1	9.2	9.9	
Key labor indicators											
Labor force (millions)	153.9	157.6	158.0	158.7	167.1	168.6	170.9	178.0	181.7	186.3	
Non-farm labor productivity (1992=1.00)	1.10	1.14	1.16	1.18	1.33	1.42	1.47	1.55	1.75	1.85	
Unemployment rate (percent)	9.63	8.11	7.51	7.10	6.04	5.54	5.05	6.15	5.54	5.09	
Key indicators for energy demand											
Real disposable personal income	10062	10890	11035	11224	13862	14286	14978	17350	18217	19407	
Housing starts (millions)	0.63	1.40	1.75	2.22	1.40	1.96	2.78	1.19	1.89	2.95	
Commercial floorspace (billion square feet) ..	81.1	84.0	84.1	84.3	92.7	93.9	95.2	100.5	103.0	105.5	
Unit sales of light-duty vehicles (millions)	11.55	15.34	16.16	16.69	16.20	17.79	18.85	15.31	18.64	20.55	

GDP = Gross domestic product.

Btu = British thermal unit.

Sources: 2010: IHS Global Insight, Global Insight Industry and Employment models, August 2011. **Projections:** U.S. Energy Information Administration, AEO2012 National Energy Modeling System runs LM2012.D022412A, REF2012.D020112C, and HM2012.D022412A.