

Table A3. Energy prices by sector and source
(2012 dollars per million Btu, unless otherwise noted)

Sector and source	Reference case							Annual growth 2012-2040 (percent)
	2011	2012	2020	2025	2030	2035	2040	
Residential								
Propane	25.28	24.12	23.79	24.86	25.75	26.84	27.64	0.5%
Distillate fuel oil	26.93	27.30	24.67	26.95	28.60	30.57	32.64	0.6%
Natural gas	10.98	10.46	11.59	12.48	13.50	14.61	15.98	1.5%
Electricity	34.95	34.83	36.15	36.14	36.98	37.82	38.83	0.4%
Commercial								
Propane	22.20	20.75	20.33	21.66	22.79	24.14	25.17	0.7%
Distillate fuel oil	26.43	26.81	21.77	24.01	25.66	27.69	29.72	0.4%
Residual fuel oil	19.41	22.84	14.40	16.13	17.92	19.36	20.99	-0.3%
Natural gas	8.96	8.11	9.49	10.29	11.19	11.95	13.08	1.7%
Electricity	30.53	29.55	30.80	30.55	31.26	31.98	33.01	0.4%
Industrial¹								
Propane	22.63	21.09	20.64	22.06	23.27	24.73	25.84	0.7%
Distillate fuel oil	27.04	27.41	22.22	24.45	26.11	27.97	29.92	0.3%
Residual fuel oil	19.17	20.90	14.88	16.65	18.29	19.79	21.48	0.1%
Natural gas ²	5.09	3.77	5.79	6.32	6.99	7.76	8.59	3.0%
Metallurgical coal	7.13	7.25	8.43	8.95	9.51	9.93	10.20	1.2%
Other industrial coal	3.31	3.24	3.59	3.73	3.88	4.03	4.19	0.9%
Coal to liquids	--	--	--	--	--	--	--	--
Electricity	20.35	19.50	20.77	21.08	21.99	22.91	24.05	0.8%
Transportation								
Propane	26.29	25.14	24.85	25.92	26.81	28.01	28.82	0.5%
E85 ³	44.13	35.06	25.61	27.53	27.91	30.68	35.49	0.0%
Motor gasoline ⁴	30.32	30.68	25.59	27.37	28.54	30.40	32.67	0.2%
Jet fuel ⁵	23.02	22.99	19.47	21.96	23.71	25.83	28.07	0.7%
Diesel fuel (distillate fuel oil) ⁶	28.37	28.80	26.80	29.02	30.68	32.60	34.53	0.7%
Residual fuel oil	18.05	20.07	12.46	14.16	15.50	16.94	18.55	-0.3%
Natural gas ⁷	15.90	14.64	15.62	15.57	16.63	18.09	19.67	1.1%
Electricity	34.00	31.43	29.86	30.09	31.68	32.65	34.19	0.3%
Electric power⁸								
Distillate fuel oil	23.79	24.12	20.66	22.94	24.65	26.68	28.81	0.6%
Residual fuel oil	15.94	20.68	13.86	15.59	17.14	18.74	20.42	0.0%
Natural gas	4.88	3.44	5.07	5.76	6.49	7.29	8.16	3.1%
Steam coal	2.42	2.39	2.61	2.77	2.93	3.05	3.19	1.0%
Average price to all users⁹								
Propane	24.39	23.24	22.54	23.68	24.66	25.89	26.79	0.5%
E85 ³	44.13	35.06	25.61	27.53	27.91	30.68	35.49	0.0%
Motor gasoline ⁴	30.18	30.44	25.58	27.37	28.53	30.40	32.67	0.3%
Jet fuel ⁵	23.02	22.99	19.47	21.96	23.71	25.83	28.07	0.7%
Distillate fuel oil	27.95	28.36	25.70	27.98	29.67	31.58	33.54	0.6%
Residual fuel oil	17.80	20.41	13.15	14.88	16.32	17.79	19.42	-0.2%
Natural gas	6.83	5.38	7.09	7.72	8.49	9.33	10.38	2.4%
Metallurgical coal	7.13	7.25	8.43	8.95	9.51	9.93	10.20	1.2%
Other coal	2.48	2.44	2.67	2.83	2.98	3.11	3.25	1.0%
Coal to liquids	--	--	--	--	--	--	--	--
Electricity	29.52	28.85	29.72	29.67	30.56	31.49	32.63	0.4%
Non-renewable energy expenditures by sector (billion 2012 dollars)								
Residential	249.85	234.06	249.25	258.12	272.82	287.79	306.56	1.0%
Commercial	183.94	173.25	189.44	200.39	215.91	232.66	255.39	1.4%
Industrial ¹	232.59	213.75	279.45	315.89	343.02	365.43	390.91	2.2%
Transportation	757.76	755.09	632.05	653.92	667.67	711.27	772.91	0.1%
Total non-renewable expenditures	1,424.14	1,376.15	1,350.18	1,428.32	1,499.43	1,597.14	1,725.77	0.8%
Transportation renewable expenditures	0.12	0.50	4.89	10.53	12.96	13.30	11.80	11.9%
Total expenditures	1,424.26	1,376.66	1,355.07	1,438.85	1,512.39	1,610.44	1,737.56	0.8%

Table A3. Energy prices by sector and source (continued)
(nominal dollars per million Btu, unless otherwise noted)

Sector and source	Reference case							Annual growth 2012-2040 (percent)
	2011	2012	2020	2025	2030	2035	2040	
Residential								
Propane	24.83	24.12	26.94	30.63	34.67	39.98	45.83	2.3%
Distillate fuel oil	26.46	27.30	27.94	33.19	38.50	45.53	54.12	2.5%
Natural gas	10.79	10.46	13.13	15.37	18.18	21.75	26.49	3.4%
Electricity	34.34	34.83	40.94	44.52	49.78	56.33	64.39	2.2%
Commercial								
Propane	21.81	20.75	23.02	26.69	30.68	35.95	41.74	2.5%
Distillate fuel oil	25.97	26.81	24.66	29.57	34.54	41.24	49.27	2.2%
Residual fuel oil	19.07	22.84	16.31	19.87	24.12	28.84	34.80	1.5%
Natural gas	8.80	8.11	10.75	12.67	15.07	17.80	21.68	3.6%
Electricity	30.00	29.55	34.88	37.63	42.08	47.64	54.73	2.2%
Industrial¹								
Propane	22.24	21.09	23.38	27.18	31.32	36.84	42.83	2.6%
Distillate fuel oil	26.56	27.41	25.17	30.12	35.15	41.66	49.61	2.1%
Residual fuel oil	18.84	20.90	16.85	20.51	24.62	29.47	35.61	1.9%
Natural gas ²	5.00	3.77	6.56	7.79	9.41	11.55	14.25	4.9%
Metallurgical coal	7.01	7.25	9.55	11.03	12.81	14.80	16.91	3.1%
Other industrial coal	3.25	3.24	4.07	4.59	5.23	6.00	6.95	2.8%
Coal to liquids	--	--	--	--	--	--	--	--
Electricity	19.99	19.50	23.52	25.96	29.60	34.13	39.88	2.6%
Transportation								
Propane	25.83	25.14	28.14	31.93	36.09	41.71	47.79	2.3%
E85 ³	43.36	35.06	29.00	33.92	37.57	45.69	58.85	1.9%
Motor gasoline ⁴	29.79	30.68	28.98	33.72	38.42	45.28	54.17	2.1%
Jet fuel ⁵	22.61	22.99	22.06	27.05	31.91	38.47	46.53	2.5%
Diesel fuel (distillate fuel oil) ⁶	27.87	28.80	30.35	35.75	41.30	48.56	57.25	2.5%
Residual fuel oil	17.73	20.07	14.11	17.44	20.86	25.23	30.76	1.5%
Natural gas ⁷	15.62	14.64	17.69	19.18	22.38	26.95	32.61	2.9%
Electricity	33.40	31.43	33.82	37.07	42.65	48.63	56.68	2.1%
Electric power⁸								
Distillate fuel oil	23.37	24.12	23.40	28.26	33.18	39.74	47.77	2.5%
Residual fuel oil	15.67	20.68	15.70	19.21	23.08	27.92	33.86	1.8%
Natural gas	4.80	3.44	5.75	7.09	8.74	10.85	13.53	5.0%
Steam coal	2.38	2.39	2.96	3.42	3.94	4.54	5.29	2.9%

Table A3. Energy prices by sector and source (continued)
(nominal dollars per million Btu, unless otherwise noted)

Sector and source	Reference case							Annual growth 2012-2040 (percent)
	2011	2012	2020	2025	2030	2035	2040	
Average price to all users ⁹								
Propane.....	23.96	23.24	25.53	29.17	33.20	38.55	44.42	2.3%
E85 ³	43.36	35.06	29.00	33.92	37.57	45.69	58.85	1.9%
Motor gasoline ⁴	29.66	30.44	28.98	33.71	38.41	45.28	54.17	2.1%
Jet fuel ⁵	22.61	22.99	22.06	27.05	31.91	38.47	46.53	2.5%
Distillate fuel oil.....	27.46	28.36	29.11	34.46	39.94	47.04	55.61	2.4%
Residual fuel oil.....	17.49	20.41	14.90	18.32	21.97	26.49	32.20	1.6%
Natural gas.....	6.71	5.38	8.04	9.51	11.43	13.90	17.22	4.2%
Metallurgical coal.....	7.01	7.25	9.55	11.03	12.81	14.80	16.91	3.1%
Other coal.....	2.43	2.44	3.03	3.49	4.02	4.63	5.39	2.9%
Coal to liquids.....	--	--	--	--	--	--	--	--
Electricity.....	29.01	28.85	33.66	36.55	41.13	46.90	54.11	2.3%
Non-renewable energy expenditures by sector (billion nominal dollars)								
Residential.....	245.47	234.06	282.30	317.94	367.27	428.63	508.27	2.8%
Commercial.....	180.72	173.25	214.56	246.83	290.65	346.52	423.44	3.2%
Industrial ¹	228.52	213.75	316.50	389.11	461.77	544.27	648.12	4.0%
Transportation.....	744.51	755.09	715.87	805.47	898.80	1,059.37	1,281.47	1.9%
Total non-renewable expenditures.....	1,399.23	1,376.15	1,529.23	1,759.34	2,018.49	2,378.79	2,861.30	2.6%
Transportation renewable expenditures.....	0.12	0.50	5.54	12.97	17.45	19.81	19.56	14.0%
Total expenditures.....	1,399.35	1,376.66	1,534.77	1,772.32	2,035.94	2,398.59	2,880.86	2.7%

¹Includes energy for combined heat and power plants that have a non-regulatory status, and small on-site generating systems.

²Excludes use for lease and plant fuel.

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

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

⁵Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.

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

⁷Natural gas used as fuel in motor vehicles, trains, and ships. Price includes estimated motor vehicle fuel taxes and estimated dispensing costs or charges.

⁸Includes electricity-only and combined heat and power plants that have a regulatory status.

⁹Weighted 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 2011 and 2012 are model results and may differ from official EIA data reports.

Sources: 2011 and 2012 prices for motor gasoline, distillate fuel oil, and jet fuel are based on prices in the U.S. Energy Information Administration (EIA), *Petroleum Marketing Monthly*, DOE/EIA-0380(2013/08) (Washington, DC, August 2013). 2011 residential, commercial, and industrial natural gas delivered prices: EIA, *Natural Gas Annual 2011*, DOE/EIA-0131(2011) (Washington, DC, December 2012). 2012 residential, commercial, and industrial natural gas delivered prices: EIA, *Natural Gas Monthly*, DOE/EIA-0130(2013/06) (Washington, DC, June 2013). 2011 transportation sector natural gas delivered prices are based on: EIA, *Natural Gas Annual 2011*, DOE/EIA-0131(2011) (Washington, DC, December 2012) and estimated State taxes, Federal taxes, and dispensing costs or charges. 2012 transportation sector natural gas delivered prices are model results. 2011 and 2012 electric power sector distillate and residual fuel oil prices: EIA, *Monthly Energy Review*, DOE/EIA-0035(2013/09) (Washington, DC, September 2013). 2011 and 2012 electric power sector natural gas prices: EIA, *Electric Power Monthly*, DOE/EIA-0226, April 2012 and April 2013, Table 4.2, and EIA, *State Energy Data Report 2011*, DOE/EIA-0214(2011) (Washington, DC, June 2013). 2011 and 2012 coal prices based on: EIA, *Quarterly Coal Report, October-December 2012*, DOE/EIA-0121(2012/4Q) (Washington, DC, March 2013) and EIA, AEO2014 National Energy Modeling System run REF2014.D102413A. 2011 and 2012 electricity prices: EIA, *Monthly Energy Review*, DOE/EIA-0035(2013/09) (Washington, DC, September 2013). 2011 and 2012 E85 prices derived from monthly prices in the Clean Cities Alternative Fuel Price Report.

Projections: EIA, AEO2014 National Energy Modeling System run REF2014.D102413A.