

Table 3. Energy Prices by Sector and Source
(2002 Dollar per Million Btu, Unless Otherwise Noted)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Residential	15.95	14.73	15.60	15.20	14.76	14.55	14.39	14.36	14.30	14.21	14.30
Primary Energy 1/	9.85	8.14	9.58	9.26	8.71	8.54	8.46	8.43	8.26	8.15	8.27
Petroleum Products 2/	10.95	9.87	11.53	10.83	9.81	9.80	9.81	9.86	9.92	9.90	10.00
Distillate Fuel	9.09	8.23	9.11	8.31	8.02	7.93	7.86	7.89	7.88	7.82	7.84
Liquefied Petroleum Gas	15.05	12.92	16.49	16.15	13.59	13.66	13.73	13.77	13.88	13.89	14.07
Natural Gas	9.53	7.65	9.03	8.82	8.39	8.19	8.08	8.03	7.80	7.67	7.80
Electricity	25.51	24.73	24.87	24.44	24.13	23.81	23.48	23.37	23.41	23.30	23.26
Commercial	15.67	14.68	15.01	14.56	14.14	13.86	13.68	13.72	13.80	13.77	13.88
Primary Energy 1/	8.07	6.35	7.84	7.32	6.89	6.74	6.69	6.70	6.55	6.48	6.59
Petroleum Products 2/	7.25	6.88	7.62	7.01	6.45	6.35	6.34	6.36	6.37	6.34	6.38
Distillate Fuel	6.38	6.07	6.71	6.12	5.62	5.53	5.49	5.50	5.49	5.45	5.49
Residual Fuel	3.51	4.21	4.97	4.13	4.00	4.02	4.05	4.08	4.11	4.13	4.16
Natural Gas	8.44	6.37	8.08	7.57	7.17	6.99	6.93	6.93	6.74	6.64	6.78
Electricity	23.43	22.82	22.28	21.57	21.07	20.63	20.24	20.23	20.44	20.39	20.43
Industrial 3/	7.24	6.31	7.29	6.70	6.39	6.36	6.39	6.48	6.48	6.44	6.51
Primary Energy	5.87	4.77	6.09	5.42	5.09	5.08	5.12	5.20	5.17	5.14	5.23
Petroleum Products 2/	7.73	6.35	7.50	7.09	6.65	6.66	6.71	6.77	6.83	6.84	6.92
Distillate Fuel	6.62	6.21	6.87	6.27	5.79	5.69	5.68	5.68	5.68	5.68	5.72
Liquefied Petroleum Gas	12.48	8.28	10.56	10.33	9.27	9.42	9.49	9.61	9.72	9.72	9.90
Residual Fuel	3.31	3.89	4.60	3.82	3.61	3.63	3.66	3.69	3.72	3.74	3.78
Natural Gas 4/	4.91	3.75	5.60	4.50	4.17	4.09	4.13	4.24	4.11	4.05	4.19
Metallurgical Coal	1.71	1.87	2.03	2.02	1.99	1.98	1.96	1.97	1.96	1.96	1.94
Steam Coal	1.51	1.52	1.63	1.61	1.59	1.58	1.58	1.59	1.58	1.58	1.58
Electricity	15.11	14.74	13.96	13.67	13.52	13.37	13.26	13.37	13.49	13.36	13.30
Transportation	10.58	9.91	11.12	10.17	10.28	10.36	10.43	10.46	10.49	10.50	10.55
Primary Energy	10.55	9.88	11.09	10.14	10.25	10.33	10.41	10.44	10.47	10.48	10.52
Petroleum Products 2/	10.55	9.88	11.09	10.14	10.25	10.34	10.41	10.44	10.47	10.48	10.52
Distillate Fuel 5/	10.16	9.41	10.41	9.50	9.62	9.91	10.13	10.15	10.08	10.12	10.22
Jet Fuel 6/	6.27	5.97	6.72	6.33	6.02	5.78	5.72	5.74	5.75	5.76	5.83
Motor Gasoline 7/	11.99	11.15	12.54	11.42	11.63	11.71	11.77	11.81	11.87	11.87	11.89
Residual Fuel	3.94	3.77	4.45	3.70	3.48	3.50	3.53	3.55	3.58	3.60	3.63
Liquefied Petroleum Gas 8/	17.12	15.00	16.47	16.46	14.79	14.84	14.88	14.92	14.98	14.96	15.11
Natural Gas 9/	8.69	7.38	9.43	8.25	7.94	7.97	8.11	8.28	8.23	8.26	8.44
Ethanol (E85) 10/	16.56	15.19	16.83	16.83	16.78	16.88	17.09	17.15	17.18	17.22	17.40
Electricity	21.58	21.10	21.35	20.74	20.22	19.77	19.45	19.46	19.61	19.57	19.63
Average End-Use Energy	10.95	10.10	11.10	10.42	10.22	10.18	10.18	10.23	10.25	10.23	10.30
Primary Energy	8.69	7.70	9.01	8.28	8.13	8.14	8.19	8.24	8.23	8.22	8.30
Electricity	21.79	21.20	20.90	20.40	20.04	19.72	19.43	19.43	19.56	19.47	19.45
Electric Generators 11/											
Fossil Fuel Average	2.27	1.89	2.22	2.01	1.93	1.91	1.91	1.96	1.92	1.92	1.97
Petroleum Products	5.00	4.32	4.91	4.50	4.22	4.23	4.24	4.25	4.23	4.21	4.27
Distillate Fuel	6.24	5.58	6.17	5.62	5.10	4.98	4.97	4.95	4.90	4.92	4.94
Residual Fuel	4.55	4.04	4.65	4.00	3.88	3.92	3.94	3.95	3.97	3.99	4.02
Natural Gas	5.30	3.77	5.62	4.50	4.18	4.10	4.14	4.23	4.11	4.04	4.19
Steam Coal	1.25	1.26	1.24	1.23	1.23	1.23	1.22	1.23	1.23	1.22	1.22

Table 3. Energy Prices by Sector and Source
(2002 Dollar per Million Btu, Unless Otherwise Noted)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average Price to All Users 12/											
Petroleum Products 2/	9.74	8.94	10.11	9.40	9.31	9.38	9.45	9.49	9.55	9.57	9.62
Distillate Fuel	9.14	8.52	9.38	8.60	8.55	8.72	8.87	8.89	8.88	8.93	9.01
Jet Fuel	6.27	5.97	6.72	6.33	6.02	5.78	5.72	5.74	5.75	5.76	5.83
Liquefied Petroleum Gas	13.00	9.27	11.82	11.57	10.21	10.35	10.43	10.53	10.65	10.65	10.82
Motor Gasoline 7/	11.99	11.15	12.53	11.42	11.63	11.71	11.77	11.81	11.87	11.87	11.89
Residual Fuel	4.16	3.92	4.58	3.83	3.66	3.68	3.71	3.74	3.76	3.78	3.81
Natural Gas	6.63	5.07	6.85	5.99	5.62	5.50	5.49	5.52	5.36	5.27	5.39
Coal	1.27	1.28	1.27	1.26	1.26	1.25	1.25	1.25	1.25	1.25	1.25
Ethanol (E85) 10/	16.56	15.19	16.83	16.83	16.78	16.88	17.09	17.15	17.18	17.22	17.40
Electricity	21.79	21.20	20.90	20.40	20.04	19.72	19.43	19.43	19.56	19.47	19.45
Non-Renewable Energy Expenditures by Sector (billion 2002 dollars)											
Residential	168.08	160.37	173.30	172.66	169.12	168.98	169.20	171.18	171.95	173.01	175.79
Commercial	129.31	119.67	125.15	122.63	122.33	123.09	124.15	126.96	130.23	132.72	136.34
Industrial	138.60	120.96	137.78	128.52	125.41	126.16	128.14	131.12	131.82	132.71	136.16
Transportation	275.57	259.11	294.76	278.63	290.33	300.06	308.56	316.07	323.50	330.65	338.69
Total Non-Renewable Expenditures	711.55	660.11	730.99	702.44	707.19	718.29	730.04	745.34	757.51	769.08	786.98
Transportation Renewable Expenditures	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04
Total Expenditures	711.56	660.12	731.00	702.45	707.21	718.31	730.07	745.36	757.54	769.11	787.02

Table 3. Energy Prices by Sector and Source
(2002 Dollar per Million Btu, Unless Otherwise Noted)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Residential	14.50	14.65	14.78	14.93	15.02	15.01	15.05	14.99	15.08	15.25	15.27
Primary Energy 1/	8.39	8.53	8.61	8.72	8.76	8.77	8.74	8.69	8.76	8.91	8.91
Petroleum Products 2/	10.06	10.18	10.25	10.38	10.51	10.59	10.67	10.75	10.86	10.95	11.03
Distillate Fuel	7.88	7.96	8.00	8.06	8.13	8.17	8.28	8.33	8.39	8.43	8.45
Liquefied Petroleum Gas	14.12	14.23	14.29	14.46	14.63	14.68	14.65	14.69	14.79	14.90	14.99
Natural Gas	7.94	8.10	8.18	8.29	8.30	8.30	8.25	8.17	8.24	8.40	8.39
Electricity	23.48	23.55	23.66	23.77	23.85	23.74	23.81	23.67	23.73	23.85	23.82
Commercial	14.13	14.21	14.41	14.62	14.76	14.78	14.86	14.83	14.93	15.10	15.12
Primary Energy 1/	6.72	6.86	6.94	7.04	7.07	7.09	7.08	7.04	7.11	7.24	7.24
Petroleum Products 2/	6.40	6.45	6.48	6.53	6.60	6.66	6.74	6.78	6.83	6.86	6.89
Distillate Fuel	5.52	5.57	5.59	5.66	5.73	5.80	5.90	5.96	6.01	6.04	6.06
Residual Fuel	4.19	4.22	4.25	4.27	4.30	4.33	4.36	4.39	4.41	4.44	4.47
Natural Gas	6.93	7.10	7.20	7.32	7.34	7.34	7.30	7.24	7.31	7.47	7.46
Electricity	20.69	20.61	20.82	21.02	21.19	21.15	21.24	21.14	21.21	21.36	21.34
Industrial 3/	6.63	6.73	6.82	6.96	7.04	7.08	7.12	7.12	7.21	7.32	7.33
Primary Energy	5.33	5.45	5.51	5.64	5.70	5.75	5.77	5.79	5.88	5.99	6.00
Petroleum Products 2/	6.96	7.02	7.04	7.15	7.24	7.33	7.40	7.46	7.54	7.60	7.64
Distillate Fuel	5.75	5.78	5.79	5.85	5.93	6.03	6.14	6.19	6.24	6.27	6.29
Liquefied Petroleum Gas	9.97	10.07	10.12	10.29	10.41	10.47	10.51	10.58	10.66	10.74	10.82
Residual Fuel	3.80	3.83	3.86	3.88	3.92	3.95	3.98	4.00	4.03	4.06	4.09
Natural Gas 4/	4.37	4.55	4.65	4.81	4.84	4.84	4.81	4.78	4.89	5.05	5.02
Metallurgical Coal	1.92	1.91	1.91	1.90	1.89	1.88	1.88	1.87	1.84	1.82	1.80
Steam Coal	1.56	1.56	1.55	1.55	1.55	1.55	1.54	1.52	1.53	1.54	1.54
Electricity	13.49	13.47	13.63	13.81	13.96	13.93	14.01	13.93	13.99	14.07	14.03
Transportation	10.52	10.51	10.51	10.53	10.55	10.55	10.56	10.55	10.54	10.57	10.60
Primary Energy	10.50	10.48	10.49	10.50	10.52	10.53	10.53	10.53	10.52	10.54	10.57
Petroleum Products 2/	10.50	10.49	10.49	10.50	10.53	10.53	10.53	10.53	10.52	10.54	10.57
Distillate Fuel 5/	10.21	10.12	10.16	10.16	10.15	10.14	10.12	10.06	10.00	10.01	10.01
Jet Fuel 6/	5.84	5.85	5.83	5.85	5.90	5.96	6.03	6.04	6.06	6.08	6.10
Motor Gasoline 7/	11.86	11.86	11.86	11.87	11.90	11.89	11.89	11.90	11.90	11.92	11.96
Residual Fuel	3.65	3.68	3.71	3.73	3.76	3.79	3.82	3.85	3.88	3.90	3.93
Liquefied Petroleum Gas 8/	15.12	15.21	15.23	15.39	15.58	15.59	15.43	15.39	15.51	15.62	15.71
Natural Gas 9/	8.63	8.83	8.94	9.07	9.11	9.13	9.08	9.00	9.06	9.20	9.18
Ethanol (E85) 10/	17.57	17.66	17.73	17.79	17.85	17.89	18.47	18.50	18.28	18.37	18.43
Electricity	19.91	20.05	20.16	20.25	20.32	20.22	20.20	20.03	20.03	20.09	20.01
Average End-Use Energy	10.39	10.44	10.51	10.61	10.68	10.69	10.71	10.70	10.76	10.84	10.86
Primary Energy	8.35	8.41	8.46	8.53	8.57	8.60	8.60	8.60	8.64	8.72	8.74
Electricity	19.68	19.66	19.82	19.99	20.12	20.05	20.13	20.03	20.10	20.21	20.18
Electric Generators 11/											
Fossil Fuel Average	2.03	2.09	2.12	2.16	2.18	2.19	2.19	2.16	2.18	2.19	2.16
Petroleum Products	4.35	4.40	4.45	4.54	4.55	4.59	4.62	4.65	4.67	4.74	4.76
Distillate Fuel	4.95	4.99	5.01	5.09	5.15	5.25	5.36	5.41	5.47	5.51	5.54
Residual Fuel	4.04	4.07	4.10	4.14	4.16	4.20	4.23	4.27	4.31	4.34	4.38
Natural Gas	4.36	4.54	4.64	4.78	4.82	4.82	4.79	4.75	4.85	5.00	4.96
Steam Coal	1.22	1.22	1.22	1.22	1.21	1.21	1.20	1.19	1.20	1.20	1.21

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(2002 Dollar per Million Btu, Unless Otherwise Noted)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Average Price to All Users 12/											
Petroleum Products 2/	9.61	9.61	9.62	9.65	9.70	9.73	9.76	9.79	9.81	9.84	9.88
Distillate Fuel	8.99	8.94	8.96	8.97	9.01	9.04	9.09	9.09	9.07	9.08	9.11
Jet Fuel	5.84	5.85	5.83	5.85	5.90	5.96	6.03	6.04	6.06	6.08	6.10
Liquefied Petroleum Gas	10.89	10.99	11.04	11.21	11.33	11.39	11.41	11.47	11.55	11.63	11.71
Motor Gasoline 7/	11.86	11.86	11.86	11.87	11.90	11.89	11.89	11.90	11.90	11.92	11.96
Residual Fuel	3.84	3.87	3.90	3.93	3.96	3.99	4.02	4.05	4.08	4.11	4.14
Natural Gas	5.54	5.71	5.80	5.93	5.94	5.94	5.89	5.84	5.93	6.10	6.07
Coal	1.24	1.24	1.24	1.24	1.23	1.23	1.22	1.21	1.22	1.22	1.23
Ethanol (E85) 10/	17.57	17.66	17.73	17.79	17.85	17.89	18.47	18.50	18.28	18.37	18.43
Electricity	19.68	19.66	19.82	19.99	20.12	20.05	20.13	20.03	20.10	20.21	20.18
Non-Renewable Energy Expenditures by Sector (billion 2002 dollars)											
Residential	180.11	182.80	185.78	189.01	191.99	193.03	195.28	196.46	199.98	203.08	204.89
Commercial	140.98	143.94	148.04	152.16	155.75	158.35	161.80	164.12	167.90	172.27	174.81
Industrial	140.46	144.56	147.88	152.53	156.26	159.42	162.75	164.72	169.02	173.20	175.61
Transportation	344.88	351.43	357.70	363.66	370.04	375.84	381.63	387.07	392.36	398.96	406.33
Total Non-Renewable Expenditures	806.42	822.72	839.40	857.37	874.04	886.65	901.46	912.36	929.26	947.52	961.64
Transportation Renewable Expenditures	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06
Total Expenditures	806.46	822.76	839.45	857.41	874.09	886.70	901.51	912.42	929.32	947.58	961.70

Table 3. Energy Prices by Sector and Source
(2002 Dollar per Million Btu, Unless Otherwise Noted)

	2023	2024	2025	2002- 2025
Residential	15.25	15.35	15.38	0.2%
Primary Energy 1/	8.91	8.91	8.89	0.4%
Petroleum Products 2/	11.11	11.17	11.26	0.6%
Distillate Fuel	8.47	8.50	8.53	0.2%
Liquefied Petroleum Gas	15.06	15.11	15.19	0.7%
Natural Gas	8.37	8.36	8.32	0.4%
Electricity	23.70	23.86	23.88	-0.2%
Commercial	15.09	15.23	15.28	0.2%
Primary Energy 1/	7.23	7.23	7.22	0.6%
Petroleum Products 2/	6.90	6.93	6.98	0.1%
Distillate Fuel	6.07	6.10	6.15	0.1%
Residual Fuel	4.49	4.52	4.55	0.3%
Natural Gas	7.45	7.44	7.41	0.7%
Electricity	21.22	21.42	21.48	-0.3%
Industrial 3/	7.32	7.37	7.42	0.7%
Primary Energy	6.01	6.03	6.07	1.1%
Petroleum Products 2/	7.68	7.72	7.81	0.9%
Distillate Fuel	6.30	6.34	6.40	0.1%
Liquefied Petroleum Gas	10.89	10.95	11.11	1.3%
Residual Fuel	4.11	4.14	4.17	0.3%
Natural Gas 4/	5.01	5.00	4.99	1.3%
Metallurgical Coal	1.78	1.77	1.77	-0.2%
Steam Coal	1.54	1.53	1.53	0.0%
Electricity	13.92	14.08	14.09	-0.2%
Transportation	10.62	10.66	10.69	0.3%
Primary Energy	10.60	10.64	10.67	0.3%
Petroleum Products 2/	10.60	10.64	10.67	0.3%
Distillate Fuel 5/	10.05	10.02	10.03	0.3%
Jet Fuel 6/	6.12	6.15	6.21	0.2%
Motor Gasoline 7/	11.97	12.03	12.06	0.3%
Residual Fuel	3.96	3.99	4.02	0.3%
Liquefied Petroleum Gas 8/	15.75	15.76	15.83	0.2%
Natural Gas 9/	9.15	9.13	9.09	0.9%
Ethanol (E85) 10/	18.48	18.53	18.58	0.9%
Electricity	19.86	19.96	19.92	-0.2%
Average End-Use Energy	10.86	10.92	10.96	0.4%
Primary Energy	8.76	8.79	8.82	0.6%
Electricity	20.06	20.23	20.26	-0.2%
Electric Generators 11/				
Fossil Fuel Average	2.13	2.13	2.11	0.5%
Petroleum Products	4.76	4.82	4.88	0.5%
Distillate Fuel	5.56	5.58	5.62	0.0%
Residual Fuel	4.42	4.45	4.50	0.5%
Natural Gas	4.94	4.93	4.92	1.2%
Steam Coal	1.22	1.22	1.22	-0.1%

Table 3. Energy Prices by Sector and Source
 (2002 Dollar per Million Btu, Unless Otherwise Noted)

	2023	2024	2025	2002- 2025
Average Price to All Users 12/				
Petroleum Products 2/	9.92	9.96	10.01	0.5%
Distillate Fuel	9.16	9.15	9.18	0.3%
Jet Fuel	6.12	6.15	6.21	0.2%
Liquefied Petroleum Gas	11.77	11.83	11.96	1.1%
Motor Gasoline 7/	11.97	12.03	12.06	0.3%
Residual Fuel	4.17	4.20	4.23	0.3%
Natural Gas	6.06	6.05	6.03	0.8%
Coal	1.23	1.23	1.24	-0.1%
Ethanol (E85) 10/	18.48	18.53	18.58	0.9%
Electricity	20.06	20.23	20.26	-0.2%
Non-Renewable Energy Expenditures by Sector (billion 2002 dollars)				
Residential	206.40	210.05	211.69	1.2%
Commercial	176.89	181.19	184.74	1.9%
Industrial	178.09	181.79	185.61	1.9%
Transportation	413.84	422.28	430.99	2.2%
Total Non-Renewable Expenditures	975.22	995.32	1013.03	1.9%
Transportation Renewable Expenditures	0.06	0.07	0.07	8.6%
Total Expenditures	975.28	995.39	1013.10	1.9%

Table 3. Energy Prices by Sector and Source
(2002 Dollar per Million Btu, Unless Otherwise Noted)

1/ Weighted average price includes fuels below as well as coal.

2/ This quantity is the weighted average for all petroleum products, not just those listed below.

3/ Includes combined heat and power, which produces electricity and other useful thermal energy.

4/ Excludes use for lease and plant fuel.

5/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.

6/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

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

8/ Includes Federal and State taxes while excluding county and local taxes.

9/ Compressed natural gas used as a vehicle fuel. Price includes estimated motor vehicle fuel taxes.

10/ 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 actually varies seasonally. The annual average ethanol content of 74 percent ethanol was used for this forecast.

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

12/ 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.

Note: Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 and 2002 prices for gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual 2002, http://www.eia.doe.gov/pub/oil_gas/petroleum/data_publications/petroleum_marketing_annual/current/pdf/pmaall.pdf (August 2003). 2001 residential, commercial, and transportation natural gas delivered prices: EIA, Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 residential, commercial, and transportation natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). 2001 and 2002 electric power sector natural gas prices: Federal Energy Regulatory Commissions, FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." 2001 and 2002 industrial natural gas delivered prices are based on: EIA, Manufacturing Energy Consumption Survey 1998. 2001 and 2002 coal prices based on EIA, Quarterly Coal Report, October-December 2002, DOE/EIA-0340(2002/4Q) (Washington, DC, March 2003) and EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e. 2001 and 2002 electricity prices: Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002). 2001 and 2002 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e.