

Table 2. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Residential													
Liquefied Petroleum Gases	0.54	0.51	0.53	0.53	0.53	0.53	0.53	0.54	0.54	0.55	0.55	0.56	0.56
Kerosene	0.09	0.10	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Distillate Fuel Oil	0.93	0.93	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89
Liquid Fuels and Other Petroleum Subtotal	1.55	1.54	1.53	1.53	1.52	1.52	1.53	1.53	1.55	1.55	1.55	1.55	1.55
Natural Gas	5.02	4.98	4.61	5.02	5.10	5.14	5.18	5.23	5.28	5.30	5.32	5.35	5.38
Coal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Renewable Energy 1/ Electricity	4.41	4.66	4.73	4.78	4.89	4.97	5.06	5.14	5.23	5.29	5.36	5.43	5.51
Delivered Energy	11.39	11.60	11.28	11.78	11.97	12.07	12.21	12.34	12.49	12.56	12.65	12.74	12.85
Electricity Related Losses	9.75	10.15	10.30	10.40	10.56	10.72	10.90	11.01	11.14	11.21	11.34	11.44	11.59
Total	21.15	21.75	21.58	22.17	22.53	22.80	23.11	23.34	23.62	23.78	23.99	24.18	24.44
Commercial													
Liquefied Petroleum Gases	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Motor Gasoline 2/ Kerosene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Distillate Fuel Oil	0.02	0.02	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Residual Fuel Oil	0.47	0.48	0.46	0.44	0.43	0.44	0.45	0.46	0.46	0.47	0.48	0.48	0.48
Liquid Fuels and Other Petroleum Subtotal	0.12	0.14	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.14	0.14	0.14
Natural Gas	0.76	0.77	0.76	0.73	0.74	0.75	0.75	0.77	0.77	0.79	0.79	0.79	0.79
Coal	3.23	3.15	3.01	3.11	3.20	3.26	3.31	3.39	3.46	3.53	3.58	3.64	3.68
Renewable Energy 3/ Electricity	0.10	0.10	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Delivered Energy	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Electricity Related Losses	4.19	4.32	4.37	4.45	4.59	4.68	4.77	4.87	4.98	5.09	5.19	5.28	5.38
Total	8.40	8.46	8.34	8.51	8.74	8.90	9.05	9.25	9.43	9.62	9.78	9.93	10.08
Electricity Related Losses	9.27	9.42	9.51	9.68	9.90	10.10	10.27	10.44	10.61	10.78	10.97	11.13	11.31
Total	17.67	17.88	17.84	18.19	18.64	19.00	19.33	19.69	20.04	20.40	20.75	21.06	21.38
Industrial 4/													
Liquefied Petroleum Gases	2.27	2.13	2.19	2.29	2.31	2.28	2.26	2.25	2.25	2.25	2.25	2.24	2.25
Motor Gasoline 2/ Distillate Fuel Oil	0.32	0.32	0.32	0.32	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33
Residual Fuel Oil	1.21	1.23	1.30	1.24	1.21	1.19	1.18	1.18	1.18	1.19	1.19	1.19	1.20
Petrochemical Feedstocks	0.22	0.23	0.22	0.18	0.18	0.18	0.18	0.17	0.18	0.18	0.18	0.18	0.18
Other Petroleum 5/ Liquid Fuels and Other Petroleum Subtotal	1.54	1.38	1.32	1.42	1.47	1.47	1.48	1.49	1.49	1.49	1.49	1.49	1.49
Natural Gas	4.53	4.45	4.44	4.14	4.17	4.18	4.05	4.20	4.18	4.24	4.15	4.26	4.29
Natural-Gas-to-Liquids Heat and Power	10.09	9.73	9.79	9.60	9.66	9.61	9.47	9.61	9.59	9.65	9.57	9.68	9.73
Lease and Plant Fuel 6/ Natural Gas Subtotal	7.45	6.84	6.96	7.36	7.42	7.57	7.86	7.76	7.84	7.84	7.99	7.90	7.94
Metallurgical Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Industrial Coal	1.13	1.10	1.12	1.10	1.11	1.11	1.10	1.09	1.09	1.08	1.10	1.10	1.11
Coal-to-Liquids Heat and Power	8.58	7.94	8.08	8.46	8.53	8.67	8.95	8.84	8.93	8.93	9.10	9.00	9.05
Net Coal Coke Imports	0.65	0.62	0.66	0.62	0.62	0.61	0.60	0.60	0.60	0.59	0.59	0.59	0.58
Coal Subtotal	1.40	1.35	1.37	1.35	1.37	1.37	1.37	1.36	1.36	1.35	1.35	1.35	1.35
Biofuels Heat and Coproducts	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.09	0.09	0.12	0.12	0.12
Renewable Energy 7/ Electricity	0.14	0.04	0.06	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Delivered Energy	2.18	2.01	2.08	1.99	2.01	2.00	2.00	2.06	2.06	2.05	2.08	2.07	2.07
Electricity Related Losses	0.21	0.24	0.32	0.35	0.45	0.61	0.69	0.71	0.72	0.73	0.73	0.74	0.74
Total	1.70	1.44	1.57	1.58	1.58	1.58	1.60	1.62	1.64	1.67	1.69	1.71	1.74
Delivered Energy	3.48	3.48	3.48	3.56	3.58	3.60	3.63	3.65	3.69	3.72	3.74	3.76	3.79
Electricity Related Losses	26.24	24.85	25.33	25.55	25.82	26.08	26.33	26.49	26.64	26.74	26.90	26.97	27.12
Total	7.68	7.60	7.58	7.73	7.74	7.76	7.81	7.82	7.86	7.88	7.91	7.93	7.96
Total	33.92	32.45	32.91	33.28	33.55	33.84	34.14	34.32	34.49	34.62	34.81	34.89	35.08

Table 2. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Transportation													
Liquefied Petroleum Gases	0.03	0.04	0.04	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06
E85 8/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Motor Gasoline 2/	17.01	17.00	17.18	17.11	17.14	17.24	17.37	17.58	17.80	18.03	18.30	18.57	18.84
Jet Fuel 9/	3.38	3.37	3.41	3.53	3.66	3.83	4.04	4.13	4.19	4.25	4.30	4.34	4.39
Distillate Fuel Oil 10/	5.93	6.02	6.17	6.31	6.41	6.52	6.64	6.79	6.92	7.05	7.16	7.28	7.40
Residual Fuel Oil	0.74	0.81	0.74	0.76	0.78	0.80	0.82	0.83	0.83	0.83	0.83	0.84	0.84
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum 11/	0.15	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19
Liquid Fuels and Other Petroleum Subtotal	27.25	27.42	27.72	27.95	28.23	28.63	29.11	29.55	29.98	30.40	30.83	31.26	31.71
Pipeline Fuel Natural Gas	0.59	0.58	0.57	0.63	0.65	0.66	0.66	0.67	0.68	0.68	0.69	0.70	0.70
Compressed Natural Gas	0.03	0.03	0.04	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.08
Electricity	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Delivered Energy	27.89	28.05	28.36	28.65	28.96	29.37	29.86	30.31	30.75	31.18	31.63	32.07	32.53
Electricity Related Losses	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07
Total	27.94	28.11	28.41	28.71	29.02	29.43	29.92	30.38	30.82	31.25	31.69	32.14	32.59
Delivered Energy Consumption, All Sectors													
Liquefied Petroleum Gases	2.93	2.77	2.85	2.96	2.98	2.95	2.93	2.93	2.94	2.94	2.94	2.95	2.96
E85 8/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Motor Gasoline 2/	17.38	17.37	17.55	17.47	17.51	17.60	17.74	17.94	18.17	18.40	18.67	18.94	19.22
Jet Fuel 9/	3.38	3.37	3.41	3.53	3.66	3.83	4.04	4.13	4.19	4.25	4.30	4.34	4.39
Kerosene	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15
Distillate Fuel Oil	8.54	8.65	8.85	8.90	8.96	9.05	9.17	9.32	9.47	9.61	9.73	9.84	9.96
Residual Fuel Oil	1.08	1.17	1.09	1.08	1.10	1.12	1.13	1.14	1.14	1.16	1.15	1.15	1.16
Petrochemical Feedstocks	1.54	1.38	1.32	1.42	1.47	1.47	1.48	1.49	1.49	1.49	1.49	1.49	1.49
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum 12/	4.66	4.61	4.59	4.30	4.33	4.34	4.22	4.36	4.34	4.40	4.31	4.42	4.46
Liquid Fuels and Other Petroleum Subtotal	39.65	39.46	39.80	39.81	40.15	40.51	40.86	41.46	41.89	42.39	42.75	43.29	43.79
Natural Gas	15.71	15.01	14.63	15.54	15.78	16.02	16.41	16.44	16.65	16.75	16.98	16.96	17.09
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	0.00	0.00	0.00
Lease and Plant Fuel 6/	1.13	1.10	1.12	1.10	1.11	1.10	1.10	1.09	1.09	1.08	1.10	1.10	1.11
Pipeline Natural Gas	0.59	0.58	0.57	0.63	0.65	0.66	0.66	0.67	0.68	0.68	0.69	0.70	0.70
Natural Gas Subtotal	17.44	16.68	16.31	17.28	17.53	17.78	18.17	18.20	18.42	18.51	18.77	18.76	18.89
Metallurgical Coal	0.65	0.62	0.66	0.62	0.62	0.61	0.60	0.60	0.60	0.59	0.59	0.59	0.58
Other Coal	1.51	1.46	1.46	1.45	1.48	1.48	1.48	1.47	1.47	1.46	1.46	1.46	1.46
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.09	0.09	0.12	0.12	0.12
Net Coal Coke Imports	0.14	0.04	0.06	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Coal Subtotal	2.30	2.12	2.18	2.09	2.12	2.11	2.11	2.17	2.17	2.16	2.19	2.18	2.18
Biofuels Heat and Coproducts	0.21	0.24	0.32	0.35	0.45	0.61	0.69	0.71	0.72	0.73	0.73	0.74	0.74
Renewable Energy 13/	2.21	1.97	2.10	2.13	2.13	2.13	2.14	2.16	2.18	2.20	2.21	2.24	2.26
Electricity	12.11	12.49	12.60	12.82	13.09	13.28	13.49	13.70	13.93	14.12	14.31	14.51	14.71
Delivered Energy	73.92	72.97	73.30	74.49	75.48	76.42	77.46	78.39	79.31	80.11	80.96	81.71	82.57
Electricity Related Losses	26.75	27.23	27.44	27.87	28.26	28.64	29.04	29.33	29.67	29.94	30.28	30.56	30.92
Total	100.67	100.19	100.75	102.35	103.73	105.07	106.50	107.72	108.97	110.05	111.24	112.28	113.50
Electric Power 14/													
Distillate Fuel Oil	0.15	0.19	0.20	0.21	0.21	0.23	0.24	0.24	0.25	0.25	0.24	0.24	0.24
Residual Fuel Oil	0.99	0.96	0.57	0.65	0.65	0.65	0.67	0.68	0.71	0.75	0.77	0.74	0.74
Liquid Fuels and Other Petroleum Subtotal	1.14	1.16	0.77	0.85	0.87	0.88	0.90	0.92	0.95	1.00	1.01	0.97	0.98
Natural Gas	5.61	5.95	6.05	6.07	6.57	6.69	6.56	6.70	6.88	7.03	7.07	7.31	7.39
Steam Coal	20.30	20.75	20.96	21.16	21.21	21.55	22.13	22.39	22.61	22.84	23.27	23.45	23.76
Nuclear Power	8.22	8.13	8.20	8.28	8.25	8.21	8.23	8.25	8.38	8.40	8.43	8.47	8.61
Renewable Energy 15/	3.55	3.64	3.97	4.26	4.40	4.57	4.67	4.73	4.73	4.75	4.78	4.83	4.86
Electricity Imports	0.04	0.08	0.09	0.06	0.05	0.02	0.04	0.03	0.04	0.05	0.04	0.03	0.03
Total	38.86	39.71	40.05	40.69	41.35	41.92	42.53	43.03	43.59	44.06	44.59	45.07	45.64
Total Energy Consumption													
Liquefied Petroleum Gases	2.93	2.77	2.85	2.96	2.98	2.95	2.93	2.93	2.94	2.94	2.94	2.95	2.96
E85 8/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Motor Gasoline 2/	17.38	17.37	17.55	17.47	17.51	17.60	17.74	17.94	18.17	18.40	18.67	18.94	19.22
Jet Fuel 9/	3.38	3.37	3.41	3.53	3.66	3.83	4.04	4.13	4.19	4.25	4.30	4.34	4.39

Table 2. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Kerosene	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15
Distillate Fuel Oil	8.69	8.84	9.05	9.11	9.17	9.28	9.40	9.56	9.72	9.86	9.97	10.08	10.21
Residual Fuel Oil	2.07	2.14	1.66	1.73	1.75	1.77	1.80	1.81	1.85	1.91	1.92	1.89	1.90
Petrochemical Feedstocks	1.54	1.38	1.32	1.42	1.47	1.47	1.48	1.49	1.49	1.49	1.49	1.49	1.49
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Petroleum 12/	4.66	4.61	4.59	4.30	4.33	4.34	4.22	4.36	4.34	4.40	4.31	4.42	4.46
Liquid Fuels and Other Petroleum Subtotal	40.79	40.61	40.57	40.67	41.02	41.39	41.76	42.38	42.84	43.39	43.76	44.26	44.77
Natural Gas	21.33	20.96	20.68	21.62	22.34	22.71	22.97	23.14	23.53	23.77	24.05	24.27	24.48
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	0.00	0.00	0.00
Lease and Plant Fuel 6/	1.13	1.10	1.12	1.10	1.11	1.11	1.10	1.09	1.09	1.08	1.10	1.10	1.11
Pipeline Natural Gas	0.59	0.58	0.57	0.63	0.65	0.66	0.66	0.67	0.68	0.68	0.69	0.70	0.70
Natural Gas Subtotal	23.05	22.63	22.37	23.35	24.10	24.47	24.73	24.90	25.30	25.54	25.84	26.07	26.28
Metallurgical Coal	0.65	0.62	0.66	0.62	0.62	0.61	0.60	0.60	0.60	0.59	0.59	0.59	0.58
Other Coal	21.81	22.21	22.42	22.61	22.69	23.03	23.61	23.87	24.08	24.30	24.73	24.91	25.21
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.09	0.09	0.12	0.12	0.12
Net Coal Coke Imports	0.14	0.04	0.06	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Coal Subtotal	22.60	22.87	23.14	23.25	23.33	23.66	24.24	24.56	24.78	25.00	25.46	25.64	25.93
Nuclear Power	8.22	8.13	8.20	8.28	8.25	8.21	8.23	8.25	8.38	8.40	8.43	8.47	8.61
Biofuels Heat and Coproducts	0.21	0.24	0.32	0.35	0.45	0.61	0.69	0.71	0.72	0.73	0.73	0.74	0.74
Renewable Energy 16/	5.76	5.61	6.06	6.39	6.53	6.70	6.81	6.89	6.91	6.94	6.99	7.07	7.12
Electricity Imports	0.04	0.08	0.09	0.06	0.05	0.02	0.04	0.03	0.04	0.05	0.04	0.03	0.03
Total	100.67	100.19	100.75	102.35	103.73	105.07	106.50	107.72	108.97	110.05	111.24	112.28	113.50
Energy Use & Related Statistics													
Delivered Energy Use	73.92	72.97	73.30	74.49	75.48	76.42	77.46	78.39	79.31	80.11	80.96	81.71	82.57
Total Energy Use	100.67	100.19	100.75	102.35	103.73	105.07	106.50	107.72	108.97	110.05	111.24	112.28	113.50
Ethanol Consumed in Motor Gasoline and E85	0.29	0.33	0.45	0.51	0.63	0.83	0.91	0.92	0.94	0.95	0.95	0.98	0.99
Population (millions)	294.23	296.94	299.63	302.29	304.93	307.60	310.26	312.93	315.61	318.30	321.00	323.70	326.39
Gross Domestic Product (billion 2000 dollars)	10704	11049	11415	11696	12052	12419	12790	13175	13530	13895	14290	14698	15139
Carbon Dioxide Emissions (million metric tons)	5923.1	5945.3	5939.8	5999.3	6059.3	6124.5	6214.0	6295.6	6369.2	6441.6	6526.7	6588.9	6661.9

Table 2. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2005-2030
Residential															
Liquefied Petroleum Gases	0.56	0.57	0.57	0.58	0.58	0.58	0.59	0.59	0.60	0.60	0.61	0.61	0.61	0.62	0.8%
Kerosene	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	-0.3%
Distillate Fuel Oil	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.78	0.78	0.77	0.76	-0.8%
Liquid Fuels and Other Petroleum Subtotal	1.54	1.53	1.53	1.53	1.52	1.51	1.50	1.50	1.49	1.49	1.48	1.48	1.47	1.46	-0.2%
Natural Gas	5.37	5.38	5.40	5.43	5.43	5.44	5.44	5.46	5.45	5.46	5.48	5.48	5.47	5.47	0.4%
Coal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-1.2%
Renewable Energy 1/ Electricity	0.40 5.57	0.40 5.64	0.40 5.71	0.40 5.80	0.40 5.85	0.40 5.92	0.40 5.99	0.40 6.08	0.40 6.13	0.40 6.20	0.39 6.27	0.39 6.36	0.39 6.41	0.39 6.47	-0.2% 1.3%
Delivered Energy	12.89	12.97	13.06	13.17	13.21	13.28	13.34	13.44	13.48	13.55	13.62	13.72	13.74	13.80	0.7%
Electricity Related Losses	11.70	11.83	11.94	12.08	12.15	12.25	12.36	12.47	12.50	12.57	12.67	12.78	12.83	12.89	1.0%
Total	24.59	24.79	25.00	25.26	25.36	25.53	25.70	25.91	25.98	26.13	26.29	26.50	26.57	26.70	0.8%
Commercial															
Liquefied Petroleum Gases	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.4%
Motor Gasoline 2/ Kerosene	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.05 0.03	0.6% 0.4%
Distillate Fuel Oil	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.49	0.49	0.49	0.49	0.49	0.1%
Residual Fuel Oil	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.2%
Liquid Fuels and Other Petroleum Subtotal	0.79	0.80	0.79	0.80	0.80	0.80	0.80	0.80	0.81	0.81	0.81	0.81	0.81	0.81	0.2%
Natural Gas	3.72	3.76	3.81	3.86	3.91	3.96	4.00	4.05	4.10	4.15	4.21	4.26	4.31	4.36	1.3%
Coal	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	-0.1%
Renewable Energy 3/ Electricity	0.12 5.48	0.12 5.57	0.12 5.67	0.12 5.78	0.12 5.89	0.12 6.00	0.12 6.12	0.12 6.24	0.12 6.36	0.12 6.49	0.12 6.62	0.12 6.76	0.12 6.89	0.12 7.03	0.0% 2.0%
Delivered Energy	10.21	10.35	10.50	10.66	10.82	10.98	11.14	11.30	11.48	11.67	11.86	12.04	12.24	12.43	1.6%
Electricity Related Losses	11.51	11.69	11.86	12.03	12.22	12.41	12.62	12.80	12.97	13.15	13.37	13.59	13.81	14.01	1.6%
Total	21.72	22.04	22.36	22.69	23.04	23.39	23.76	24.10	24.45	24.82	25.23	25.63	26.04	26.44	1.6%
Industrial 4/															
Liquefied Petroleum Gases	2.24	2.24	2.25	2.26	2.26	2.27	2.28	2.29	2.31	2.31	2.33	2.35	2.38	2.40	0.5%
Motor Gasoline 2/ Distillate Fuel Oil	0.33 1.20	0.33 1.21	0.33 1.21	0.33 1.22	0.34 1.22	0.34 1.22	0.34 1.22	0.34 1.23	0.35 1.23	0.35 1.24	0.35 1.25	0.35 1.25	0.35 1.25	0.36 1.26	0.4% 0.1%
Residual Fuel Oil	0.18	0.18	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	-0.9%
Petrochemical Feedstocks	1.49	1.48	1.49	1.50	1.50	1.51	1.51	1.52	1.52	1.53	1.54	1.55	1.56	1.57	0.5%
Other Petroleum 5/ Liquid Fuels and Other Petroleum Subtotal	4.21 9.65	4.30 9.74	4.38 9.83	4.34 9.82	4.45 9.94	4.54 10.05	4.53 10.07	4.56 10.12	4.48 10.07	4.65 10.26	4.70 10.34	4.61 10.29	4.62 10.35	4.78 10.55	0.3% 0.3%
Natural Gas	8.07	8.03	8.06	8.26	8.26	8.27	8.36	8.43	8.68	8.59	8.67	8.89	8.99	8.90	1.1%
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	0.00	0.00	0.00	0.00	N/A
Lease and Plant Fuel 6/ Natural Gas Subtotal	1.11 9.18	1.15 9.18	1.20 9.26	1.21 9.46	1.21 9.47	1.21 9.48	1.20 9.56	1.19 9.62	1.17 9.85	1.16 9.75	1.16 9.83	1.16 10.04	1.16 10.14	1.15 10.05	0.2% 0.9%
Metallurgical Coal	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	-0.3%
Other Industrial Coal	1.35	1.34	1.34	1.34	1.34	1.35	1.35	1.35	1.35	1.35	1.36	1.36	1.36	1.36	0.0%
Coal-to-Liquids Heat and Power	0.14	0.17	0.19	0.21	0.23	0.33	0.35	0.48	0.67	0.81	0.81	0.88	0.90	0.93	N/A
Net Coal Coke Imports	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-3.4%
Coal Subtotal	2.08	2.10	2.11	2.14	2.16	2.27	2.28	2.41	2.61	2.75	2.75	2.83	2.85	2.89	1.5%
Biofuels Heat and Coproducts	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	5.2%
Renewable Energy 7/ Electricity	1.76 3.79	1.77 3.79	1.79 3.82	1.81 3.83	1.83 3.85	1.86 3.87	1.87 3.89	1.90 3.91	1.93 3.94	1.98 3.97	1.98 4.01	2.00 4.04	2.02 4.06	2.05 4.09	1.4% 0.6%
Delivered Energy	27.20	27.33	27.58	27.84	28.04	28.33	28.48	28.78	29.23	29.52	29.75	30.05	30.29	30.51	0.8%
Electricity Related Losses	7.97	7.96	7.98	7.98	7.99	8.01	8.01	8.02	8.03	8.05	8.09	8.11	8.13	8.15	0.3%
Total	35.17	35.29	35.56	35.82	36.03	36.34	36.50	36.80	37.26	37.57	37.84	38.17	38.42	38.66	0.7%

Table 2. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2005- 2030
Transportation															
Liquefied Petroleum Gases	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	2.8%
E85 8/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	11.8%
Motor Gasoline 2/	19.12	19.40	19.66	19.95	20.24	20.51	20.81	21.09	21.38	21.69	22.00	22.29	22.60	22.89	1.2%
Jet Fuel 9/	4.44	4.48	4.53	4.54	4.55	4.56	4.57	4.58	4.59	4.60	4.62	4.64	4.67	4.70	1.3%
Distillate Fuel Oil 10/	7.49	7.57	7.68	7.81	7.95	8.09	8.24	8.40	8.59	8.79	8.98	9.18	9.38	9.58	1.9%
Residual Fuel Oil	0.84	0.84	0.84	0.85	0.85	0.85	0.85	0.86	0.86	0.86	0.86	0.86	0.87	0.87	0.3%
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.1%
Other Petroleum 11/	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.2%
Liquid Fuels and Other Petroleum Subtotal	32.14	32.55	32.98	33.41	33.85	34.28	34.74	35.20	35.69	36.22	36.75	37.27	37.80	38.34	1.3%
Pipeline Fuel Natural Gas	0.70	0.74	0.78	0.79	0.80	0.80	0.80	0.80	0.79	0.79	0.79	0.79	0.79	0.79	1.3%
Compressed Natural Gas	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	5.5%
Electricity	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1.8%
Delivered Energy	32.95	33.41	33.88	34.33	34.78	35.22	35.68	36.14	36.63	37.16	37.69	38.22	38.75	39.29	1.4%
Electricity Related Losses	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	1.5%
Total	33.02	33.48	33.95	34.40	34.85	35.29	35.75	36.22	36.71	37.23	37.77	38.29	38.83	39.37	1.4%
Delivered Energy Consumption, All Sectors															
Liquefied Petroleum Gases	2.96	2.96	2.97	2.99	3.00	3.02	3.04	3.05	3.07	3.08	3.10	3.13	3.17	3.19	0.6%
E85 8/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	11.8%
Motor Gasoline 2/	19.50	19.78	20.05	20.34	20.63	20.90	21.20	21.49	21.78	22.09	22.40	22.70	23.00	23.30	1.2%
Jet Fuel 9/	4.44	4.48	4.53	4.54	4.55	4.56	4.57	4.58	4.59	4.60	4.62	4.64	4.67	4.70	1.3%
Kerosene	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	-0.2%
Distillate Fuel Oil	10.05	10.13	10.23	10.36	10.48	10.62	10.77	10.92	11.11	11.31	11.50	11.70	11.88	12.09	1.3%
Residual Fuel Oil	1.16	1.16	1.16	1.16	1.16	1.17	1.17	1.17	1.18	1.18	1.18	1.18	1.19	1.19	0.1%
Petrochemical Feedstocks	1.49	1.48	1.49	1.50	1.50	1.51	1.51	1.52	1.52	1.53	1.54	1.55	1.56	1.57	0.5%
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.1%
Other Petroleum 12/	4.38	4.47	4.55	4.51	4.61	4.71	4.70	4.73	4.65	4.82	4.87	4.78	4.79	4.96	0.3%
Liquid Fuels and Other Petroleum Subtotal	44.12	44.61	45.13	45.55	46.10	46.64	47.11	47.62	48.06	48.77	49.37	49.84	50.43	51.17	1.0%
Natural Gas	17.24	17.26	17.37	17.65	17.70	17.77	17.91	18.04	18.33	18.31	18.45	18.74	18.88	18.86	0.9%
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	0.00	0.00	0.00	0.00	N/A
Lease and Plant Fuel 6/	1.11	1.15	1.20	1.21	1.21	1.20	1.19	1.17	1.16	1.16	1.16	1.16	1.16	1.15	0.2%
Pipeline Natural Gas	0.70	0.74	0.78	0.79	0.80	0.80	0.80	0.80	0.79	0.79	0.79	0.79	0.79	0.79	1.3%
Natural Gas Subtotal	19.05	19.15	19.35	19.64	19.71	19.78	19.91	20.03	20.30	20.26	20.41	20.69	20.83	20.80	0.9%
Metallurgical Coal	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	-0.3%
Other Coal	1.45	1.45	1.45	1.45	1.45	1.45	1.46	1.46	1.46	1.46	1.47	1.47	1.47	1.47	0.0%
Coal-to-Liquids Heat and Power	0.14	0.17	0.19	0.21	0.23	0.33	0.35	0.48	0.67	0.81	0.81	0.88	0.90	0.93	N/A
Net Coal Coke Imports	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-3.4%
Coal Subtotal	2.18	2.20	2.22	2.24	2.26	2.37	2.39	2.52	2.71	2.86	2.86	2.94	2.96	2.99	1.4%
Biofuels Heat and Coproducts	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	5.2%
Renewable Energy 13/	2.28	2.29	2.31	2.34	2.36	2.38	2.39	2.42	2.44	2.47	2.49	2.51	2.54	2.56	1.1%
Electricity	14.87	15.04	15.24	15.45	15.63	15.83	16.03	16.26	16.47	16.70	16.94	17.19	17.40	17.63	1.4%
Delivered Energy	83.26	84.06	85.02	86.00	86.85	87.80	88.65	89.66	90.82	91.90	92.92	94.03	95.02	96.03	1.1%
Electricity Related Losses	31.25	31.54	31.85	32.17	32.43	32.74	33.06	33.36	33.57	33.85	34.21	34.56	34.85	35.13	1.0%
Total	114.50	115.60	116.87	118.16	119.27	120.54	121.71	123.03	124.39	125.74	127.13	128.59	129.87	131.16	1.1%
Electric Power 14/															
Distillate Fuel Oil	0.25	0.25	0.25	0.25	0.26	0.26	0.27	0.27	0.28	0.28	0.28	0.28	0.28	0.28	1.5%
Residual Fuel Oil	0.73	0.72	0.71	0.72	0.71	0.71	0.71	0.72	0.71	0.71	0.72	0.73	0.72	0.72	-1.1%
Liquid Fuels and Other Petroleum Subtotal	0.98	0.97	0.96	0.97	0.96	0.97	0.98	0.99	0.99	0.99	1.00	1.02	1.01	1.01	-0.6%
Natural Gas	7.30	7.34	7.36	7.40	7.31	7.20	6.91	6.78	6.65	6.53	6.36	6.18	6.09	6.09	0.1%
Steam Coal	24.04	24.26	24.59	25.05	25.58	26.15	26.79	27.36	27.90	28.52	29.15	29.79	30.44	31.14	1.6%
Nuclear Power	8.82	9.03	9.18	9.23	9.23	9.23	9.23	9.23	9.23	9.23	9.29	9.37	9.44	9.33	0.6%
Renewable Energy 15/	4.93	4.94	4.95	4.93	4.93	4.97	5.02	5.07	5.09	5.11	5.14	5.17	5.14	5.15	1.4%
Electricity Imports	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.04	-2.6%
Total	46.12	46.58	47.09	47.62	48.05	48.57	49.10	49.62	50.04	50.55	51.15	51.75	52.24	52.77	1.1%
Total Energy Consumption															
Liquefied Petroleum Gases	2.96	2.96	2.97	2.99	3.00	3.02	3.04	3.05	3.07	3.08	3.10	3.13	3.17	3.19	0.6%
E85 8/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	11.8%
Motor Gasoline 2/	19.50	19.78	20.05	20.34	20.63	20.90	21.20	21.49	21.78	22.09	22.40	22.70	23.00	23.30	1.2%
Jet Fuel 9/	4.44	4.48	4.53	4.54	4.55	4.56	4.57	4.58	4.59	4.60	4.62	4.64	4.67	4.70	1.3%

Table 2. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2005-2030
Kerosene	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	-0.2%
Distillate Fuel Oil	10.29	10.37	10.48	10.61	10.74	10.88	11.03	11.20	11.38	11.58	11.78	11.98	12.17	12.37	1.4%
Residual Fuel Oil	1.89	1.88	1.87	1.88	1.87	1.87	1.89	1.89	1.89	1.89	1.90	1.92	1.91	1.91	-0.4%
Petrochemical Feedstocks	1.49	1.48	1.49	1.50	1.50	1.51	1.51	1.52	1.52	1.53	1.54	1.55	1.56	1.57	0.5%
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	43.1%
Other Petroleum 12/	4.38	4.47	4.55	4.51	4.61	4.71	4.70	4.73	4.65	4.82	4.87	4.78	4.79	4.96	0.3%
Liquid Fuels and Other Petroleum Subtotal	45.10	45.58	46.09	46.52	47.07	47.61	48.09	48.61	49.05	49.76	50.37	50.86	51.44	52.17	1.0%
Natural Gas	24.54	24.60	24.73	25.05	25.01	24.97	24.95	24.95	25.11	24.96	24.98	25.10	25.06	24.95	0.7%
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	0.00	0.00	0.00	0.00	N/A
Lease and Plant Fuel 6/	1.11	1.15	1.20	1.21	1.21	1.21	1.20	1.19	1.17	1.16	1.16	1.16	1.16	1.15	0.2%
Pipeline Natural Gas	0.70	0.74	0.78	0.79	0.80	0.80	0.80	0.80	0.79	0.79	0.79	0.79	0.79	0.79	1.3%
Natural Gas Subtotal	26.36	26.49	26.70	27.04	27.02	26.98	26.94	26.94	27.08	26.92	26.93	27.05	27.00	26.89	0.7%
Metallurgical Coal	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	-0.3%
Other Coal	25.50	25.71	26.04	26.50	27.03	27.61	28.24	28.82	29.36	29.98	30.61	31.26	31.91	32.61	1.5%
Coal-to-Liquids Heat and Power	0.14	0.17	0.19	0.21	0.23	0.33	0.35	0.48	0.67	0.81	0.81	0.88	0.90	0.93	N/A
Net Coal Coke Imports	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-3.4%
Coal Subtotal	26.23	26.46	26.81	27.29	27.84	28.53	29.18	29.88	30.62	31.37	32.01	32.73	33.40	34.14	1.6%
Nuclear Power	8.82	9.03	9.18	9.23	9.23	9.23	9.23	9.23	9.23	9.23	9.29	9.37	9.44	9.33	0.6%
Biofuels Heat and Coproducts	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	5.2%
Renewable Energy 16/	7.21	7.24	7.26	7.27	7.28	7.35	7.41	7.49	7.54	7.58	7.63	7.68	7.67	7.71	1.3%
Electricity Imports	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.04	-2.6%
Total	114.50	115.60	116.87	118.16	119.28	120.54	121.71	123.03	124.39	125.74	127.13	128.59	129.87	131.16	1.1%
Energy Use & Related Statistics															
Delivered Energy Use	83.26	84.06	85.02	86.00	86.85	87.80	88.65	89.66	90.82	91.90	92.92	94.03	95.02	96.03	1.1%
Total Energy Use	114.50	115.60	116.87	118.16	119.28	120.54	121.71	123.03	124.39	125.74	127.13	128.59	129.87	131.16	1.1%
Ethanol Consumed in Motor Gasoline and E85	1.01	1.02	1.04	1.06	1.08	1.10	1.11	1.12	1.15	1.16	1.18	1.19	1.20	1.22	5.3%
Population (millions)	329.09	331.77	334.46	337.13	339.82	342.53	345.26	348.01	350.78	353.57	356.38	359.21	362.07	364.94	0.8%
Gross Domestic Product (billion 2000 dollars)	15611	16072	16560	17077	17584	18082	18590	19119	19666	20225	20785	21338	21909	22494	2.9%
Carbon Dioxide Emissions (million metric tons)	6715.9	6777.2	6853.9	6944.5	7030.3	7128.1	7220.2	7320.1	7424.6	7533.0	7633.8	7741.0	7839.7	7950.2	1.2%

Table 2. Energy Consumption by Sector and Source
(quadrillion Btu, unless otherwise noted)

1/ Includes wood used for residential heating. See Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

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

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Table 5 and/or Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

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

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, tire-derived fuel, and miscellaneous petroleum products.

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

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

8/ 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 is used for this forecast.

9/ Includes only kerosene type.

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

11/ Includes aviation gasoline and lubricants.

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

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

14/ 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.

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

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 and 2005 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: 2004 and 2005 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2005, DOE/EIA-0384(2005) (Washington, DC, July 2006). 2004 and 2005 population and gross domestic product: Global Insight macroeconomic model CTL0806. 2004 and 2005 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2005, DOE/EIA-0573(2005) (Washington, DC, November 2006). Projections: EIA, AEO2007 National Energy Modeling System run aeo2007.d112106a.