

**Table 4. Residential Sector Key Indicators and Consumption**  
 (Quadrillion Btu per Year, Unless Otherwise Noted)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Key Indicators</b>													
Households (millions)													
Single-Family	74.87	76.15	77.51	78.76	79.91	81.05	82.15	83.22	84.29	85.37	86.44	87.50	88.57
Multifamily	29.22	29.51	29.78	29.98	30.18	30.41	30.64	30.88	31.12	31.36	31.61	31.85	32.10
Mobile Homes	6.38	6.35	6.32	6.30	6.30	6.34	6.42	6.52	6.63	6.74	6.85	6.95	7.05
Total	110.47	112.01	113.61	115.04	116.39	117.80	119.21	120.61	122.03	123.48	124.89	126.30	127.73
Average House Square Footage	1730	1742	1756	1769	1781	1792	1803	1813	1823	1833	1843	1852	1861
Energy Intensity (million Btu per household)													
Delivered Energy Consumption	102.3	103.6	100.9	101.3	101.4	102.1	103.2	103.5	103.8	104.0	104.2	103.7	103.3
Total Energy Consumption (thousand Btu per square foot)	189.4	190.3	186.4	188.5	188.8	190.2	191.9	192.0	192.4	192.3	192.5	191.6	191.0
Delivered Energy Consumption	59.1	59.5	57.4	57.3	56.9	57.0	57.2	57.1	57.0	56.7	56.6	56.0	55.5
Total Energy Consumption	109.5	109.2	106.2	106.6	106.0	106.1	106.4	105.9	105.5	104.9	104.5	103.5	102.6
Delivered Energy Consumption by Fuel													
Electricity													
Space Heating	0.39	0.40	0.39	0.41	0.41	0.42	0.43	0.43	0.44	0.44	0.44	0.45	0.45
Space Cooling	0.71	0.65	0.63	0.67	0.68	0.69	0.70	0.70	0.71	0.72	0.72	0.73	0.73
Water Heating	0.37	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Refrigeration	0.41	0.40	0.39	0.39	0.38	0.38	0.37	0.37	0.36	0.36	0.36	0.35	0.35
Cooking	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12
Clothes Dryers	0.24	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Freezers	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Lighting	0.76	0.78	0.79	0.82	0.84	0.86	0.89	0.90	0.92	0.94	0.96	0.97	0.98
Clothes Washers 1/	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Dishwashers 1/	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Color Televisions	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22
Personal Computers	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.11	0.11	0.12
Furnace Fans	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10
Other Uses 2/	0.88	0.95	1.01	1.05	1.09	1.13	1.18	1.22	1.26	1.30	1.34	1.38	1.42
Delivered Energy	4.32	4.37	4.39	4.55	4.63	4.73	4.85	4.93	5.02	5.10	5.19	5.25	5.33
Natural Gas													
Space Heating	3.52	3.70	3.56	3.65	3.69	3.76	3.85	3.92	4.00	4.06	4.12	4.13	4.15
Space Cooling	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
Water Heating	1.14	1.17	1.15	1.17	1.18	1.20	1.23	1.25	1.27	1.28	1.29	1.29	1.29
Cooking	0.21	0.21	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.24
Clothes Dryers	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10
Other Uses 3/	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
Delivered Energy	5.04	5.25	5.10	5.20	5.26	5.37	5.50	5.59	5.68	5.77	5.84	5.86	5.88
Distillate													
Space Heating	0.79	0.84	0.79	0.76	0.77	0.77	0.78	0.78	0.78	0.78	0.78	0.77	0.77
Water Heating	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11
Other Uses 4/	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

**Table 4. Residential Sector Key Indicators and Consumption**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Delivered Energy	0.92	0.96	0.91	0.88	0.88	0.89	0.90	0.90	0.90	0.90	0.90	0.89	0.88
Liquefied Petroleum Gas													
Space Heating	0.31	0.30	0.30	0.27	0.28	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.30
Water Heating	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
Cooking	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Other Uses 3/	0.18	0.17	0.18	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22
Delivered Energy	0.57	0.54	0.56	0.52	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.59	0.60
Marketed Renewables (wood) 5/	0.39	0.40	0.39	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.39	0.39
Other Fuels 6/	0.07	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Delivered Energy Consumption by End-Use													
Space Heating	5.46	5.72	5.53	5.60	5.64	5.73	5.84	5.92	6.00	6.07	6.14	6.15	6.17
Space Cooling	0.71	0.65	0.63	0.67	0.68	0.69	0.70	0.70	0.71	0.72	0.72	0.73	0.73
Water Heating	1.69	1.71	1.69	1.70	1.72	1.75	1.78	1.80	1.82	1.83	1.84	1.84	1.84
Refrigeration	0.41	0.40	0.39	0.39	0.38	0.38	0.37	0.37	0.36	0.36	0.36	0.35	0.35
Cooking	0.34	0.34	0.34	0.35	0.36	0.36	0.37	0.37	0.37	0.38	0.38	0.39	0.39
Clothes Dryers	0.31	0.31	0.31	0.32	0.33	0.33	0.34	0.35	0.35	0.35	0.36	0.36	0.36
Freezers	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Lighting	0.76	0.78	0.79	0.82	0.84	0.86	0.89	0.90	0.92	0.94	0.96	0.97	0.98
Clothes Washers	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Dishwashers	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Color Televisions	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.19	0.20	0.21	0.21	0.22
Personal Computers	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.11	0.11	0.12
Furnace Fans	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10
Other Uses 7/	1.16	1.22	1.28	1.32	1.36	1.41	1.47	1.52	1.56	1.61	1.66	1.70	1.74
Delivered Energy	11.30	11.61	11.46	11.65	11.80	12.03	12.30	12.48	12.67	12.84	13.02	13.09	13.19
Electricity Related Losses	9.62	9.71	9.72	10.03	10.17	10.38	10.58	10.68	10.80	10.90	11.02	11.11	11.20
Total Energy Consumption by End-Use													
Space Heating	6.32	6.61	6.40	6.50	6.54	6.65	6.77	6.85	6.94	7.01	7.08	7.09	7.12
Space Cooling	2.29	2.11	2.03	2.14	2.16	2.19	2.21	2.23	2.24	2.25	2.25	2.26	2.26
Water Heating	2.51	2.53	2.50	2.52	2.54	2.57	2.61	2.62	2.64	2.65	2.66	2.65	2.64
Refrigeration	1.33	1.30	1.26	1.25	1.23	1.21	1.19	1.17	1.15	1.13	1.12	1.10	1.09
Cooking	0.56	0.57	0.57	0.58	0.59	0.60	0.60	0.61	0.61	0.62	0.63	0.63	0.64
Clothes Dryers	0.84	0.85	0.85	0.86	0.87	0.89	0.90	0.90	0.91	0.91	0.92	0.92	0.92
Freezers	0.43	0.42	0.40	0.40	0.39	0.39	0.38	0.38	0.37	0.37	0.37	0.37	0.37
Lighting	2.45	2.51	2.53	2.61	2.67	2.75	2.82	2.86	2.91	2.94	2.99	3.01	3.04
Clothes Washers	0.10	0.10	0.10	0.10	0.10	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.15
Dishwashers	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Color Televisions	0.40	0.43	0.45	0.48	0.50	0.53	0.55	0.58	0.60	0.62	0.64	0.66	0.68
Personal Computers	0.22	0.23	0.23	0.24	0.25	0.27	0.29	0.31	0.32	0.33	0.34	0.35	0.36
Furnace Fans	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.31	0.31	0.32
Other Uses 7/	3.13	3.32	3.51	3.64	3.75	3.90	4.05	4.16	4.28	4.39	4.51	4.61	4.73
Total	20.92	21.31	21.17	21.68	21.97	22.41	22.87	23.16	23.47	23.75	24.04	24.20	24.40
Non-Marketed Renewables													
Geothermal 8/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Solar 9/	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Total	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04

**Table 4. Residential Sector Key Indicators and Consumption**  
 (Quadrillion Btu per Year, Unless Otherwise Noted)

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2003-2025
<b>Key Indicators</b>												
Households (millions)												
Single-Family	89.62	90.62	91.60	92.57	93.55	94.55	95.54	96.53	97.52	98.51	99.50	1.2%
Multifamily	32.34	32.60	32.87	33.14	33.41	33.69	33.96	34.24	34.52	34.80	35.08	0.8%
Mobile Homes	7.15	7.23	7.32	7.40	7.47	7.55	7.62	7.69	7.76	7.83	7.90	1.0%
Total	129.11	130.46	131.78	133.10	134.43	135.78	137.12	138.46	139.81	141.14	142.48	1.1%
Average House Square Footage	1871	1879	1888	1896	1904	1912	1920	1928	1935	1943	1950	0.5%
Energy Intensity												
(million Btu per household)												
Delivered Energy Consumption	102.9	102.9	102.4	102.2	101.8	101.6	101.0	100.7	100.5	100.6	100.1	-0.2%
Total Energy Consumption	190.4	190.3	189.5	189.0	188.4	188.3	187.3	187.0	187.0	187.4	186.8	-0.1%
(thousand Btu per square foot)												
Delivered Energy Consumption	55.0	54.8	54.3	53.9	53.5	53.1	52.6	52.2	51.9	51.8	51.3	-0.7%
Total Energy Consumption	101.8	101.3	100.4	99.7	99.0	98.5	97.6	97.0	96.6	96.4	95.8	-0.6%
Delivered Energy Consumption by Fuel												
Electricity												
Space Heating	0.45	0.46	0.46	0.46	0.46	0.46	0.46	0.47	0.47	0.47	0.47	0.7%
Space Cooling	0.73	0.74	0.75	0.75	0.76	0.76	0.77	0.78	0.79	0.79	0.80	0.9%
Water Heating	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.37	0.1%
Refrigeration	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.36	0.36	0.36	-0.5%
Cooking	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13	1.1%
Clothes Dryers	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.28	0.28	0.29	0.8%
Freezers	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	-0.1%
Lighting	0.99	1.01	1.02	1.03	1.04	1.06	1.07	1.08	1.10	1.12	1.13	1.7%
Clothes Washers 1/	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	3.3%
Dishwashers 1/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.2%
Color Televisions	0.23	0.24	0.24	0.25	0.26	0.27	0.27	0.27	0.28	0.28	0.28	3.5%
Personal Computers	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	3.5%
Furnace Fans	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	1.5%
Other Uses 2/	1.46	1.50	1.53	1.57	1.60	1.65	1.68	1.72	1.76	1.81	1.85	3.1%
Delivered Energy	5.40	5.49	5.55	5.63	5.70	5.79	5.85	5.93	6.01	6.11	6.18	1.6%
Natural Gas												
Space Heating	4.17	4.20	4.22	4.24	4.26	4.28	4.28	4.29	4.32	4.35	4.36	0.8%
Space Cooling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.9%
Water Heating	1.29	1.29	1.29	1.30	1.30	1.30	1.30	1.31	1.31	1.32	1.32	0.6%
Cooking	0.25	0.25	0.25	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.27	1.2%
Clothes Dryers	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	2.3%
Other Uses 3/	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	-0.3%
Delivered Energy	5.90	5.95	5.97	6.00	6.02	6.05	6.05	6.07	6.11	6.15	6.17	0.7%
Distillate												
Space Heating	0.77	0.76	0.75	0.74	0.73	0.73	0.71	0.71	0.70	0.69	0.68	-1.0%
Water Heating	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	-1.0%
Other Uses 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Delivered Energy	0.88	0.87	0.86	0.85	0.84	0.83	0.82	0.81	0.80	0.79	0.77	-1.0%

**Table 4. Residential Sector Key Indicators and Consumption**  
**(Quadrillion Btu per Year, Unless Otherwise Noted)**

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2003-2025
Liquefied Petroleum Gas												
Space Heating	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.30	0.31	0.30	0.1%
Water Heating	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1%
Cooking	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.6%
Other Uses 3/ Delivered Energy	0.23	0.24	0.24	0.24	0.25	0.26	0.26	0.27	0.27	0.28	0.28	2.4%
Marketeted Renewables (wood) 5/	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.38	0.38	0.38	0.38	-0.3%
Other Fuels 6/	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.6%
Delivered Energy Consumption by End-Use												
Space Heating	6.19	6.22	6.23	6.24	6.25	6.26	6.25	6.25	6.27	6.29	6.29	0.4%
Space Cooling	0.73	0.74	0.75	0.75	0.76	0.76	0.77	0.78	0.79	0.79	0.80	0.9%
Water Heating	1.83	1.84	1.83	1.84	1.84	1.84	1.83	1.84	1.84	1.85	1.85	0.3%
Refrigeration	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.36	0.36	0.36	-0.5%
Cooking	0.39	0.40	0.40	0.41	0.41	0.42	0.42	0.42	0.43	0.43	0.44	1.1%
Clothes Dryers	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.39	0.39	0.40	0.40	1.2%
Freezers	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	-0.1%
Lighting	0.99	1.01	1.02	1.03	1.04	1.06	1.07	1.08	1.10	1.12	1.13	1.7%
Clothes Washers	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	3.3%
Dishwashers	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.2%
Color Televisions	0.23	0.24	0.24	0.25	0.26	0.27	0.27	0.27	0.28	0.28	0.28	3.5%
Personal Computers	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	3.5%
Furnace Fans	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	1.5%
Other Uses 7/ Delivered Energy	1.79	1.83	1.87	1.91	1.95	2.00	2.04	2.08	2.13	2.18	2.23	2.8%
Electricity Related Losses	13.29	13.43	13.50	13.60	13.68	13.80	13.84	13.94	14.05	14.19	14.26	0.9%
Total Energy Consumption by End-Use												
Space Heating	7.13	7.17	7.17	7.19	7.19	7.21	7.19	7.19	7.21	7.24	7.22	0.4%
Space Cooling	2.27	2.28	2.29	2.30	2.31	2.32	2.33	2.35	2.37	2.39	2.41	0.6%
Water Heating	2.63	2.63	2.63	2.62	2.62	2.61	2.60	2.60	2.60	2.61	2.60	0.1%
Refrigeration	1.08	1.08	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.08	1.08	-0.8%
Cooking	0.64	0.65	0.65	0.66	0.66	0.67	0.68	0.68	0.69	0.69	0.70	0.9%
Clothes Dryers	0.92	0.92	0.92	0.93	0.93	0.94	0.94	0.95	0.95	0.97	0.97	0.6%
Freezers	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.38	0.38	0.38	-0.4%
Lighting	3.07	3.11	3.13	3.16	3.18	3.21	3.23	3.27	3.31	3.36	3.39	1.4%
Clothes Washers	0.15	0.16	0.16	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.19	2.9%
Dishwashers	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.8%
Color Televisions	0.70	0.72	0.74	0.76	0.78	0.81	0.81	0.82	0.83	0.84	0.85	3.2%
Personal Computers	0.37	0.37	0.38	0.39	0.40	0.41	0.41	0.42	0.43	0.44	0.45	3.2%
Furnace Fans	0.32	0.32	0.33	0.33	0.33	0.33	0.34	0.34	0.34	0.35	0.35	1.2%
Other Uses 7/	4.83	4.95	5.03	5.13	5.23	5.35	5.44	5.56	5.68	5.82	5.93	2.7%
Total	24.58	24.82	24.97	25.15	25.33	25.56	25.69	25.90	26.14	26.44	26.62	1.0%
Non-Marketeted Renewables												
Geothermal 8/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	7.6%
Solar 9/	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	2.7%
Total	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	3.3%

**Table 4. Residential Sector Key Indicators and Consumption**  
(Quadrillion Btu per Year, Unless Otherwise Noted)

1/ Does not include electric water heating portion of load.

2/ Includes small electric devices, heating elements, and motors not listed above.

3/ Includes such appliances as swimming pool heaters, outdoor grills, and outdoor lighting (natural gas).

4/ Includes such appliances as swimming pool and spa heaters.

5/ Includes wood used for primary and secondary heating in wood stoves or fireplaces as reported in the Residential Energy Consumption Survey 2001.

6/ Includes kerosene and coal.

7/ Includes all other uses listed above.

8/ Includes primary energy displaced by geothermal heat pumps in space heating and cooling applications.

9/ Includes primary energy displaced by solar thermal water heaters and electricity generated using photovoltaics.

N/A = Not applicable.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Data for 2002 and 2003 are model results and may differ slightly from official EIA data reports.

Source: 2002 and 2003 based on: Energy Information Administration (EIA), Annual Energy Review 2003, DOE/EIA-0384(2003) (Washington, DC, September 2004).

Projections: EIA, AEO2005 National Energy Modeling System run aeo2005.d102004a.