

Table 1.3 Renewable energy consumption for electricity generation by energy-use sector and energy source, 2005 – 2009

(quadrillion Btu)

Sector and Source	2005	2006	2007	2008	2009
Total	3.619	3.873	3.536	3.818	4.137
Biomass	0.585	0.591	0.598	0.606	0.592
Waste	0.230	0.241	0.245	0.267	0.272
Landfill Gas	0.068	0.076	0.080	0.094	0.100
MSW Biogenic ¹	0.144	0.147	0.146	0.148	0.147
Other Biomass ²	0.018	0.018	0.019	0.024	0.025
Wood and Derived Fuels ³	0.355	0.350	0.353	0.339	0.320
Geothermal	0.147	0.145	0.145	0.146	0.146
Hydroelectric Conventional	2.703	2.869	2.446	2.512	2.669
Solar Thermal/PV	0.006	0.005	0.006	0.009	0.009
Wind	0.178	0.264	0.341	0.546	0.721
Commercial	0.021	0.022	0.020	0.021	0.024
Biomass	0.020	0.021	0.020	0.021	0.023
Waste	0.020	0.021	0.019	0.020	0.023
Landfill Gas	0.002	0.003	0.002	0.003	0.003
MSW Biogenic ¹	0.013	0.013	0.013	0.014	0.016
Other Biomass ²	0.005	0.004	0.004	0.004	0.004
Wood and Derived Fuels ³	*	*	*	*	*
Geothermal	-	-	-	-	-
Hydroelectric Conventional	0.001	0.001	0.001	0.001	0.001
Solar Thermal/PV	-	-	-	*	-
Wind	-	-	-	-	*
Industrial	0.226	0.219	0.208	0.200	0.182
Biomass	0.194	0.190	0.193	0.184	0.164
Waste	0.005	0.003	0.004	0.005	0.004
Landfill Gas	0.001	*	*	*	*
MSW Biogenic ¹	*	*	0.001	-	-
Other Biomass ²	0.003	0.003	0.003	0.004	0.004
Wood and Derived Fuels ³	0.189	0.187	0.188	0.179	0.160
Geothermal	-	-	-	-	-
Hydroelectric Conventional	0.032	0.029	0.016	0.017	0.018
Solar Thermal/PV	-	-	-	-	-
Wind	-	-	-	-	-
Electric Power ⁴	3.372	3.632	3.307	3.596	3.931
Biomass	0.371	0.379	0.386	0.401	0.405
Waste	0.205	0.216	0.221	0.242	0.244
Landfill Gas	0.064	0.072	0.077	0.091	0.097
MSW Biogenic ¹	0.131	0.134	0.132	0.135	0.131
Other Biomass ²	0.010	0.010	0.012	0.016	0.017
Wood and Derived Fuels ³	0.166	0.163	0.165	0.159	0.160
Geothermal	0.147	0.145	0.145	0.146	0.146
Hydroelectric Conventional	2.670	2.839	2.430	2.495	2.650
Solar Thermal/PV	0.006	0.005	0.006	0.009	0.009
Wind	0.178	0.264	0.341	0.546	0.721

See footnotes at end of table.

Table 1.3 Renewable energy consumption for electricity generation by energy-use sector and energy source, 2005 – 2009 (cont.)

¹Includes paper and paper board, wood, food, leather, textiles and yard trimmings.

²Agriculture byproducts/crops, sludge waste, and other biomass solids, liquids and gases.

³Black liquor, and wood/wood waste solids and liquids.

⁴The electric power sector comprises electricity-only and combined-heat-power (CHP) plants within North American Classification System (NAICS) 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

MSW = Municipal Solid Waste.

PV = Photovoltaic.

* = Less than 500 billion Btu.

- = No data reported.

Notes: Totals may not equal sum of components due to independent rounding. Starting with 2004 EIA adopted a new method of allocating fuel consumption between electric power generation and useful thermal out put (UTO) for combined heat and power (CHP) plants. The new method proportionately distributes a CHP plant's losses between the two output products (electric power and UTO) assuming the same efficiency for production of electricity as UTO.

Energy consumption for the noncombustible renewable energy sources (hydroelectric conventional, solar thermal, PV and wind) used in electricity generation is determined by multiplying generation times the fossil fuel equivalent heat rate. Energy consumption for geothermal energy used in electricity generation is determined by multiplying generation times the geothermal heat rate. See U.S. Energy Information Administration (EIA), Annual Energy Review (AER) 2009, DOE/EIA-0384 (2009) (Washington, DC, August 2010), Table A6.

Data revisions are discussed in the Highlights section.

Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report," and predecessor forms: Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."