

**Table 2. Renewable Energy Consumption by Energy Use Sector and Energy Source, 2002-2006  
(Quadrillion Btu)**

Sector and Source	2002	2003	2004	2005	2006
Total	5.893	6.151	6.261	6.404	6.844
Biomass	2.706	2.817	3.023	3.114	3.277
Biofuels	0.309	0.414	0.513	0.594	0.758
Biodiesel <sup>a</sup>	0.001	0.002	0.003	0.011	NA
Biodiesel Feedstock <sup>b</sup>	*	*	*	*	NA
Ethanol <sup>c</sup>	0.175	0.238	0.299	0.342	0.459
Ethanol Feedstock <sup>d</sup>	0.133	0.174	0.210	0.241	0.299
Waste	0.402	0.401	0.389	0.403	0.404
Landfill Gas	0.142	0.141	0.144	0.148	0.157
MSW Biogenic <sup>e</sup>	0.182	0.165	0.164	0.168	0.171
Other Biomass <sup>f</sup>	0.078	0.096	0.081	0.088	0.076
Wood and Derived Fuels	1.995	2.002	2.121	2.116	2.114
Geothermal	0.328	0.331	0.341	0.343	0.349
Hydroelectric Conventional	2.689	2.825	2.690	2.703	2.890
Solar/ PV	0.064	0.064	0.064	0.066	0.070
Wind	0.105	0.115	0.142	0.178	0.258
Residential	0.449	0.471	0.483	0.487	0.474
Biomass	0.380	0.400	0.410	0.410	0.390
Wood and Derived Fuels <sup>g</sup>	0.380	0.400	0.410	0.410	0.390
Geothermal	0.010	0.013	0.014	0.016	0.018
Solar/ PV <sup>h</sup>	0.059	0.058	0.059	0.061	0.065
Commercial	0.104	0.113	0.118	0.119	0.116
Biomass	0.095	0.101	0.105	0.105	0.101
Biofuels	*	0.001	0.001	0.001	0.001
Ethanol <sup>c</sup>	*	0.001	0.001	0.001	0.001
Waste	0.026	0.029	0.034	0.034	0.035
Landfill Gas	0.002	0.002	0.002	0.003	0.003
MSW Biogenic	0.020	0.022	0.025	0.025	0.025
Other Biomass <sup>f</sup>	0.004	0.005	0.007	0.007	0.007
Wood and Derived Fuels <sup>i</sup>	0.069	0.071	0.070	0.070	0.065
Geothermal	0.009	0.011	0.012	0.014	0.014
Hydroelectric Conventional	0.000	0.001	0.001	0.001	0.001
Industrial	1.723	1.731	1.861	1.885	1.949
Biomass	1.679	1.684	1.824	1.849	1.914
Biofuels	0.136	0.178	0.217	0.249	0.309
Ethanol <sup>c</sup>	0.003	0.004	0.006	0.007	0.010
Losses and Coproducts					
Biodiesel Feedstock <sup>b</sup>	*	*	*	*	NA
Ethanol Feedstock <sup>d</sup>	0.133	0.174	0.210	0.241	0.299
Waste	0.146	0.142	0.132	0.148	0.136
Landfill Gas	0.079	0.076	0.075	0.081	0.083
MSW Biogenic <sup>e</sup>	0.005	0.005	0.006	0.007	0.004
Other Biomass <sup>f</sup>	0.063	0.062	0.050	0.061	0.048
Wood and Derived Fuels <sup>i</sup>	1.396	1.363	1.476	1.452	1.469
Geothermal	0.005	0.003	0.004	0.004	0.004
Transportation					
Biofuels	0.172	0.235	0.295	0.345	0.448
Biodiesel <sup>a</sup>	0.001	0.002	0.003	0.011	NA
Ethanol <sup>c</sup>	0.171	0.233	0.292	0.334	0.448
Electric Power <sup>j</sup>	3.445	3.601	3.503	3.568	3.857
Biomass	0.380	0.397	0.388	0.406	0.423
Waste	0.230	0.230	0.223	0.221	0.233
Landfill Gas	0.062	0.063	0.066	0.065	0.071
MSW Biogenic	0.157	0.138	0.133	0.136	0.141
Other Biomass <sup>f</sup>	0.010	0.029	0.023	0.020	0.021
Wood and Derived Fuels <sup>i</sup>	0.150	0.167	0.165	0.185	0.190
Geothermal	0.305	0.303	0.311	0.309	0.312
Hydroelectric Conventional	2.650	2.781	2.656	2.670	2.859
Solar/ PV	0.006	0.005	0.006	0.006	0.005
Wind	0.105	0.115	0.142	0.178	0.258

<sup>a</sup> Biodiesel primarily derived from soy bean oil.

<sup>b</sup> Difference between the energy in biodiesel feedstocks (principally soy bean oil) and the energy in biodiesel consumed in the transportation sector.

<sup>c</sup> Ethanol primarily derived from corn.

<sup>d</sup> Difference between energy in ethanol feedstocks (primarily corn) and its coproducts (wet and dry distiller grains), and the energy in ethanol consumed in the transportation sector.

Table 2. Renewable Energy Consumption by Energy Use Sector and Energy Source, 2002-2006 (cont)

<sup>e</sup> Includes paper and paper board, wood, food, leather, textiles and yard trimmings.

<sup>f</sup> Agriculture byproducts/crops, sludge waste, and other biomass solids, liquids and gases.

<sup>g</sup> Wood and wood pellet fuels.

<sup>h</sup> Includes small amounts of distributed solar thermal and photovoltaic energy used in the commercial, industrial and electric power sectors.

<sup>i</sup> Black liquor, and wood/woodwaste solids and liquids.

<sup>j</sup> The 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.

PV=Photovoltaic.

MSW=Municipal Solid Waste.

\*=Less than 500 billion Btu.

NA=Not Available

Note: Data revisions are discussed in the Highlights section. Revisions to biomass removed MSW non-biogenic and tires from renewable waste energy. Totals may not equal sum of components due to independent rounding.

Data for 2006 is preliminary.

Sources: Analysis conducted by Energy Information Administration, Office of Coal, Nuclear, Electric, and Alternate Fuels and specific sources described as follows. Residential: Energy Information Administration, Form EIA-457A/G, "Residential Energy Consumption Survey;" Oregon Institute of Technology, Geo-Heat Center; and Energy Information Administration, Form EIA-63-A, "Annual Solar Thermal Collector Manufacturers Survey" and Form EIA-63B, "Annual Photovoltaic Module/Cell Manufacturers Survey." Commercial: Energy Information Administration, Form EIA-906, "Power Plant Report", "Form EIA-920, "Combined Heat and Power Plant Report;" and Oregon Institute of Technology, Geo-Heat Center. Industrial: Energy Information Administration, Form EIA-846 (A, B, C) "Manufacturing Energy Consumption Survey," Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report;" Oregon Institute of Technology, Geo-Heat Center; Government Advisory Associates, Resource Recovery Yearbook and Methane Recovery Yearbook; U.S. Environmental Protection Agency, Landfill Methane Outreach Program estimates; and losses and coproducts from the production of biodiesel and ethanol calculated as the difference between energy in feedstocks and production.

Biofuels for Transportation: Biodiesel: U.S. Department of Agriculture, Commodity Credit Corporation, Bioenergy Program estimates of production assigned to consumption and Ethanol: 2001-2004: EIA, Petroleum Supply Annual, Tables 2 and 16. Calculated as ten percent of oxygenated finished motor gasoline field production (Table 2) plus fuel ethanol refinery input (Table 16).

2005: EIA Petroleum Supply Annual 2005, Tables 1 and 15. Calculated as motor gasoline blending components adjustments (Table 1), plus finished motor gasoline adjustments (Table 1), plus fuel ethanol refinery and blender net inputs (Table 15).

2006: EIA Petroleum Supply Monthly, monthly reports, Tables 1 and 27. Calculated as motor gasoline blending components adjustments (Table 1), plus finished motor gasoline adjustments (Table 1), plus fuel ethanol refinery and blender net inputs (Table 27). Small amounts of ethanol consumption are distributed to the commercial and industrial sectors according to those sector's shares of U.S. motor gasoline supplied.

Electric Power: Energy Information Administration, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."