

Table 1.2. 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	6.150	6.261	6.444	6.922
Biomass	2.706	2.817	3.023	3.154	3.374
Biofuels	0.309	0.414	0.513	0.595	0.795
Biodiesel ^a	0.001	0.002	0.004	0.012	0.032
Biodiesel Feedstock ^b	*	*	*	*	*
Ethanol ^c	0.175	0.238	0.299	0.342	0.462
Ethanol Feedstock ^d	0.133	0.174	0.210	0.241	0.301
Waste	0.402	0.401	0.389	0.403	0.407
Landfill Gas	0.142	0.141	0.144	0.148	0.150
MSW Biogenic ^e	0.182	0.165	0.164	0.168	0.171
Other Biomass ^f	0.078	0.096	0.081	0.088	0.086
Wood and Derived Fuels	1.995	2.002	2.121	2.156	2.172
Geothermal	0.328	0.331	0.341	0.343	0.343
Hydroelectric Conventional	2.689	2.825	2.690	2.703	2.869
Solar/PV	0.064	0.064	0.065	0.066	0.072
Wind	0.105	0.115	0.142	0.178	0.264
Residential	0.449	0.471	0.483	0.527	0.495
Biomass	0.380	0.400	0.410	0.450	0.410
Wood and Derived Fuels ^g	0.380	0.400	0.410	0.450	0.410
Geothermal	0.010	0.013	0.014	0.016	0.018
Solar/PV ^h	0.059	0.058	0.059	0.061	0.067
Commercial	0.104	0.113	0.118	0.119	0.117
Biomass	0.095	0.101	0.105	0.105	0.102
Biofuels	*	0.001	0.001	0.001	0.001
Ethanol ^c	*	0.001	0.001	0.001	0.001
Waste	0.026	0.029	0.034	0.034	0.036
Landfill Gas	0.002	0.002	0.002	0.003	0.004
MSW Biogenic	0.020	0.022	0.025	0.025	0.026
Other Biomass ^f	0.004	0.005	0.007	0.007	0.007
Wood and Derived Fuels ⁱ	0.069	0.071	0.070	0.070	0.065
Geothermal	0.009	0.011	0.012	0.014	0.014
Hydroelectric Conventional	*	0.001	0.001	0.001	0.001
Industrial	1.723	1.731	1.861	1.884	1.999
Biomass	1.679	1.684	1.824	1.848	1.966
Biofuels	0.136	0.178	0.217	0.248	0.311
Ethanol ^c	0.003	0.005	0.006	0.007	0.009
Losses and Coproducts	0.133	0.174	0.210	0.241	0.301
Biodiesel Feedstock ^b	*	*	*	*	*
Ethanol Feedstock ^d	0.133	0.174	0.210	0.241	0.301
Waste	0.146	0.142	0.132	0.148	0.140
Landfill Gas	0.079	0.076	0.075	0.081	0.074
MSW Biogenic ^e	0.005	0.005	0.006	0.007	0.006
Other Biomass ^f	0.063	0.062	0.050	0.061	0.061
Wood and Derived Fuels ⁱ	1.396	1.363	1.476	1.452	1.515
Geothermal	0.005	0.003	0.004	0.004	0.004
Hydroelectric Conventional	0.039	0.043	0.033	0.032	0.029
Transportation	0.172	0.235	0.296	0.346	0.483
Biofuels	0.172	0.235	0.296	0.346	0.483
Biodiesel ^a	0.001	0.002	0.004	0.012	0.032
Ethanol ^c	0.171	0.233	0.292	0.334	0.451
Electric Power ^j	3.445	3.601	3.503	3.568	3.827
Biomass	0.380	0.397	0.388	0.406	0.412
Waste	0.230	0.230	0.223	0.221	0.231
Landfill Gas	0.062	0.063	0.066	0.065	0.073
MSW Biogenic	0.157	0.138	0.133	0.136	0.139
Other Biomass ^f	0.010	0.029	0.023	0.020	0.019
Wood and Derived Fuels ⁱ	0.150	0.167	0.165	0.185	0.182
Geothermal	0.305	0.303	0.311	0.309	0.306
Hydroelectric Conventional	2.650	2.781	2.656	2.670	2.839

Table 1.2. Renewable Energy Consumption by Energy Use Sector and Energy Source, 2002-2006
(Quadrillion Btu)

Sector and Source	2002	2003	2004	2005	2006
Solar/PV	0.006	0.005	0.006	0.006	0.005
Wind	0.105	0.115	0.142	0.178	0.264

^a Biodiesel primarily derived from soy bean oil.

^b Difference between the energy in biodiesel feedstocks (principally soy bean oil) and the energy in biodiesel consumed in the transportation sector.

^c Ethanol primarily derived from corn.

^d 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.

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

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

^g Wood and wood pellet fuels.

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

ⁱ Black liquor, and wood/woodwaste solids and liquids.

^j 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 Applicable.

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.

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: 2001-2005: U.S. Department of Agriculture, Commodity Credit Corporation, Bioenergy Program estimates of production assigned to consumption and 2006 and forward: U.S. Department of Commerce, Bureau of Census, Current Industrial Reports, Fats and Oils - Production, Consumption and Stocks, 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."