

Table 1.2 Renewable Energy Consumption by Energy Use Sector and Energy Source, 2003 - 2007

(Quadrillion Btu)

Sector and Source	2003	2004	2005	2006	2007
Total	6.150	6.261	6.424	6.909	6.813
Biomass	2.817	3.024	3.134	3.361	3.596
Biofuels	0.414	0.513	0.595	0.795	1.024
Biodiesel ¹	0.002	0.004	0.012	0.032	0.062
Ethanol ²	0.238	0.299	0.342	0.462	0.580
Losses and Coproducts	0.174	0.210	0.241	0.301	0.381
Biodiesel Feedstock ³	*	*	*	*	0.001
Ethanol Feedstock ⁴	0.174	0.210	0.241	0.301	0.380
Waste	0.401	0.389	0.403	0.414	0.430
Landfill Gas	0.141	0.144	0.148	0.157	0.173
MSW Biogenic ⁵	0.165	0.164	0.168	0.171	0.165
Other Biomass ⁶	0.096	0.081	0.088	0.086	0.092
Wood and Derived Fuels ⁷	2.002	2.121	2.136	2.152	2.142
Geothermal	0.331	0.341	0.343	0.343	0.349
Hydroelectric Conventional	2.825	2.690	2.703	2.869	2.446
Solar/PV	0.064	0.064	0.066	0.072	0.081
Wind	0.115	0.142	0.178	0.264	0.341
Residential	0.471	0.483	0.507	0.475	0.527
Biomass	0.400	0.410	0.430	0.390	0.430
Wood and Derived Fuels ⁸	0.400	0.410	0.430	0.390	0.430
Geothermal	0.013	0.014	0.016	0.018	0.022
Solar/PV ⁹	0.058	0.059	0.061	0.067	0.075
Commercial	0.113	0.118	0.119	0.117	0.117
Biomass	0.101	0.105	0.105	0.102	0.102
Biofuels	0.001	0.001	0.001	0.001	0.002
Ethanol ²	0.001	0.001	0.001	0.001	0.002
Waste	0.029	0.034	0.034	0.036	0.031
Landfill Gas	0.002	0.002	0.003	0.004	0.003
MSW Biogenic ⁵	0.022	0.025	0.025	0.026	0.021
Other Biomass ⁶	0.005	0.007	0.007	0.007	0.007
Wood and Derived Fuels ⁷	0.071	0.070	0.070	0.065	0.069
Geothermal	0.011	0.012	0.014	0.014	0.014
Hydroelectric Conventional	0.001	0.001	0.001	0.001	0.001
Industrial	1.731	1.861	1.884	2.007	2.032
Biomass	1.684	1.825	1.848	1.973	2.012
Biofuels	0.178	0.217	0.248	0.311	0.393
Ethanol ²	0.005	0.006	0.007	0.010	0.012
Losses and Coproducts	0.174	0.210	0.241	0.301	0.381
Biodiesel Feedstock ³	*	*	*	*	0.001
Ethanol Feedstock ⁴	0.174	0.210	0.241	0.301	0.380
Waste	0.142	0.132	0.148	0.147	0.162
Landfill Gas	0.076	0.076	0.081	0.081	0.093
MSW Biogenic ⁵	0.005	0.006	0.007	0.006	0.006
Other Biomass ⁶	0.062	0.050	0.061	0.061	0.063
Wood and Derived Fuels ⁷	1.363	1.476	1.452	1.515	1.457
Geothermal	0.003	0.004	0.004	0.004	0.005
Hydroelectric Conventional	0.043	0.033	0.032	0.029	0.016
Solar/PV	-	-	-	-	-
Wind	-	-	-	-	-
Transportation	0.235	0.296	0.346	0.483	0.629
Biomass	0.235	0.296	0.346	0.483	0.629
Biofuels	0.235	0.296	0.346	0.483	0.629
Biodiesel ¹	0.002	0.004	0.012	0.032	0.062
Ethanol ²	0.233	0.292	0.334	0.451	0.566
Electric Power ¹⁰	3.601	3.503	3.568	3.827	3.508
Biomass	0.397	0.388	0.406	0.412	0.423
Waste	0.230	0.223	0.221	0.231	0.237
Landfill Gas	0.063	0.066	0.065	0.073	0.077
MSW Biogenic ⁵	0.138	0.133	0.136	0.139	0.138
Other Biomass ⁶	0.029	0.023	0.020	0.019	0.022
Wood and Derived Fuels ⁷	0.167	0.165	0.185	0.182	0.186
Geothermal	0.303	0.311	0.309	0.306	0.308
Hydroelectric Conventional	2.781	2.656	2.670	2.839	2.430
Solar/PV	0.005	0.006	0.006	0.005	0.006
Wind	0.115	0.142	0.178	0.264	0.341

¹Biodiesel primarily derived from soy bean oil.

²Ethanol primarily derived from corn.

**Table 1.2 Renewable Energy Consumption by Energy Use Sector and Energy Source, 2003 - 2007
 (Quadrillion Btu) (Continued)**

Sector and Source	2003	2004	2005	2006	2007
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³Difference between the energy in biodiesel feedstocks (principally soy bean oil) and the energy in biodiesel consumed in the transportation sector.

⁴Difference 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.

⁵Includes paper and paper board, wood, food, leather, textiles and yard trimmings.

⁶Agriculture byproducts/crops, sludge waste, and other biomass solids, liquids and gases.

⁷Black liquor, and wood/woodwaste solids and liquids.

⁸Wood and wood pellet fuels.

⁹Includes small amounts of distributed solar thermal and photovoltaic energy used in the commercial, industrial and electric power sectors.

¹⁰The 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.

Data revisions are discussed in the Highlights section.

Revisions to biomass removed MSW non-biogenic and tires from renewable waste energy.

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 Form EIA-923, "Power Plant Operations 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," Form EIA-920, "Combined Heat and Power Plant Report," and Form EIA-923, "Power Plant Operations Report;" and 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). 2005-2007: EIA Petroleum Supply Annual (Various Issues), 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). 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," Form EIA-920, "Combined Heat and Power Plant Report," and Form EIA-923, "Power Plant Operations Report."