

**Table 10.1 Renewable Energy Production and Consumption by Primary Energy Source, Selected Years, 1949-2006**  
(Trillion Btu)

Year	Production <sup>1</sup>			Consumption								Total Renewable Energy
	Biomass		Total Renewable Energy <sup>4</sup>	Hydroelectric Power <sup>5</sup>	Geothermal <sup>6</sup>	Solar/PV <sup>7</sup>	Wind <sup>8</sup>	Biomass				
	Biofuels <sup>2</sup>	Total <sup>3</sup>						Wood <sup>9</sup>	Waste <sup>10</sup>	Biofuels <sup>11</sup>	Total	
1949	NA	1,549	2,974	1,425	NA	NA	NA	1,549	NA	NA	1,549	2,974
1950	NA	1,562	2,978	1,415	NA	NA	NA	1,562	NA	NA	1,562	2,978
1955	NA	1,424	2,784	1,360	NA	NA	NA	1,424	NA	NA	1,424	2,784
1960	NA	1,320	2,929	1,608	1	NA	NA	1,320	NA	NA	1,320	2,929
1965	NA	1,335	3,398	2,059	4	NA	NA	1,335	NA	NA	1,335	3,398
1970	NA	1,431	4,076	2,634	11	NA	NA	1,429	2	NA	1,431	4,076
1971	NA	1,432	4,268	2,824	12	NA	NA	1,430	2	NA	1,432	4,268
1972	NA	1,503	4,398	2,864	31	NA	NA	1,501	2	NA	1,503	4,398
1973	NA	1,529	4,433	2,861	43	NA	NA	1,527	2	NA	1,529	4,433
1974	NA	1,540	4,769	3,177	53	NA	NA	1,538	2	NA	1,540	4,769
1975	NA	1,499	4,723	3,155	70	NA	NA	1,497	2	NA	1,499	4,723
1976	NA	1,713	4,768	2,976	78	NA	NA	1,711	2	NA	1,713	4,768
1977	NA	1,838	4,249	2,333	77	NA	NA	1,837	2	NA	1,838	4,249
1978	NA	2,038	5,039	2,937	64	NA	NA	2,036	1	NA	2,038	5,039
1979	NA	2,152	5,166	2,931	84	NA	NA	2,150	2	NA	2,152	5,166
1980	NA	2,476	5,485	2,900	110	NA	NA	2,474	2	NA	2,476	5,485
1981	R13	R2,596	R5,477	2,758	123	NA	NA	2,496	88	R13	R2,596	R5,477
1982	R35	R2,664	R6,034	3,266	105	NA	NA	2,510	119	R35	R2,664	R6,034
1983	R63	R2,904	R6,561	3,527	129	NA	(s)	2,684	157	R63	R2,904	R6,561
1984	R77	R2,971	R6,522	3,386	165	(s)	(s)	2,686	208	R77	R2,971	R6,522
1985	R93	R3,016	R6,185	2,970	198	(s)	(s)	2,687	236	R93	R3,016	R6,185
1986	R107	R2,932	R6,223	3,071	219	(s)	(s)	2,562	263	R107	R2,932	R6,223
1987	R123	R2,875	R5,739	2,635	229	(s)	(s)	2,463	289	R123	R2,875	R5,739
1988	R124	R3,016	R5,568	2,334	217	(s)	(s)	2,577	315	R124	R3,016	R5,568
1989	R126	R3,160	R6,391	2,837	317	55	22	2,680	354	R126	R3,160	R6,391
1990	R111	R2,735	R6,206	3,046	336	60	29	2,216	408	R111	R2,735	R6,206
1991	R129	R2,782	R6,238	3,016	346	63	31	2,214	440	R129	R2,782	R6,238
1992	R146	R2,933	R5,993	2,617	349	64	30	2,313	473	R146	R2,933	R5,993
1993	R171	R2,910	R6,263	2,892	364	66	31	2,260	479	R171	R2,910	R6,262
1994	R190	R3,030	R6,155	2,683	338	69	36	2,324	515	R190	R3,030	R6,155
1995	R200	R3,102	R6,703	3,205	294	70	33	2,370	531	R200	R3,104	R6,705
1996	R143	R3,157	R7,167	3,590	316	71	33	2,437	577	R145	R3,159	R7,168
1997	R190	R3,111	R7,180	3,640	325	70	34	R2,371	551	R187	R3,108	R7,178
1998	R206	R2,933	R6,659	3,297	328	70	31	2,184	542	R205	R2,931	R6,657
1999	R215	R2,969	R6,683	3,268	331	69	46	R2,214	540	R213	R2,967	R6,681
2000	R238	R3,010	R6,262	2,811	317	66	57	R2,262	511	R241	R3,013	R6,264
2001	R260	R2,629	R5,318	2,242	311	65	70	2,006	R364	R258	R2,627	R5,315
2002	R314	R2,712	R5,899	2,689	328	64	105	1,995	R402	R309	R2,706	R5,893
2003	R412	R2,816	R6,149	2,825	331	64	115	2,002	R401	R414	R2,817	R6,151
2004	R501	R3,011	R6,248	2,690	341	65	142	2,121	R389	R513	R3,023	R6,261
2005	R581	R3,101	R6,391	R2,703	R343	R66	R178	R2,116	R403	R594	R3,114	R6,404
2006 <sup>P</sup>	708	3,227	6,794	2,889	349	70	258	2,114	404	758	3,277	6,844

<sup>1</sup> Production equals consumption for all renewable energy sources except biofuels.

<sup>2</sup> Total biomass inputs to the production of fuel ethanol and biodiesel.

<sup>3</sup> Wood, waste, ethanol, and biodiesel.

<sup>4</sup> Hydroelectric power, geothermal, solar/PV, wind, and biomass.

<sup>5</sup> Conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate).

<sup>6</sup> Geothermal electricity net generation (converted to Btu using the geothermal energy plants heat rate), and geothermal heat pump and direct use energy.

<sup>7</sup> Solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy.

<sup>8</sup> Wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate).

<sup>9</sup> Wood and wood-derived fuels.

<sup>10</sup> Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and

other biomass. Through 2000, also includes non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

<sup>11</sup> Fuel ethanol and biodiesel consumption, plus losses and co-products from the production of fuel ethanol and biodiesel.

R=Revised. P=Preliminary. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • See Note, "Renewable Energy Production and Consumption," at end of section. • See Table E1 for estimated renewable energy consumption for 1635-1945. • Totals may not equal sum of components due to independent rounding.

Web Pages: • For all data beginning in 1949, see <http://www.eia.doe.gov/emeu/aer/renew.html>.

• For related information, see <http://www.eia.doe.gov/fuelrenewable.html>.

Sources: **Biofuels:** Table 10.3. **All Other Data:** Tables 10.2a-c.