

**Table 10.1 Renewable Energy Production and Consumption by Source**  
(Trillion Btu)

	Production <sup>a</sup>			Consumption								Total Renewable Energy
	Biomass		Total Renewable Energy <sup>d</sup>	Hydroelectric Power <sup>e</sup>	Geothermal <sup>f</sup>	Solar <sup>g</sup>	Wind <sup>h</sup>	Biomass				
	Bio-fuels <sup>b</sup>	Total <sup>c</sup>						Wood <sup>i</sup>	Waste <sup>j</sup>	Bio-fuels <sup>k</sup>	Total	
1950 Total	NA	1,562	2,978	1,415	NA	NA	NA	1,562	NA	NA	1,562	2,978
1955 Total	NA	1,424	2,784	1,360	NA	NA	NA	1,424	NA	NA	1,424	2,784
1960 Total	NA	1,320	2,928	1,608	(s)	NA	NA	1,320	NA	NA	1,320	2,928
1965 Total	NA	1,335	3,396	2,059	2	NA	NA	1,335	NA	NA	1,335	3,396
1970 Total	NA	1,431	4,070	2,634	6	NA	NA	1,429	2	NA	1,431	4,070
1975 Total	NA	1,499	4,687	3,155	34	NA	NA	1,497	2	NA	1,499	4,687
1980 Total	NA	2,475	5,428	2,900	53	NA	NA	2,474	2	NA	2,475	5,428
1985 Total	93	3,016	6,084	2,970	97	(s)	(s)	2,687	236	93	3,016	6,084
1990 Total	111	2,735	6,040	2,634	171	59	29	2,216	408	111	2,735	6,040
1995 Total	198	3,099	6,557	3,205	152	68	33	2,370	531	200	3,101	6,559
2000 Total	233	3,006	6,102	2,811	164	63	57	2,262	511	236	3,008	6,104
2001 Total	254	2,624	5,162	2,242	164	62	70	2,006	364	253	2,622	5,160
2002 Total	308	2,705	5,731	2,689	171	60	105	1,995	402	303	2,701	5,726
2003 Total	401	2,805	5,942	2,793	173	58	113	2,002	401	403	2,806	5,944
2004 Total	486	2,996	6,063	2,688	178	58	142	2,121	389	498	3,008	6,075
2005 Total	561	3,101	6,221	2,703	181	58	178	2,137	403	574	3,114	6,233
2006 Total	716	3,212	6,586	2,869	181	61	264	2,099	397	766	3,262	6,637
2007 Total	970	3,472	6,510	2,446	186	65	341	2,089	413	983	3,485	6,523
2008 Total	1,374	3,868	7,191	2,511	192	74	546	2,059	435	1,357	3,851	7,174
2009 Total	1,570	3,953	7,620	2,669	200	78	721	1,931	452	1,553	3,936	7,604
2010 Total	1,868	4,316	8,077	2,539	208	90	923	1,981	468	1,821	4,270	8,030
2011 Total	2,029	4,501	9,095	3,103	212	111	1,168	2,010	462	1,933	4,405	8,999
2012 Total	1,929	4,406	8,743	2,629	212	157	1,340	2,010	467	1,892	4,369	8,706
2013 Total	1,981	4,647	9,250	2,562	214	225	1,601	2,170	496	2,007	4,673	9,276
2014 Total	2,103	4,861	9,607	2,467	214	337	1,728	2,242	516	2,067	4,825	9,570
2015 January	178	403	808	225	18	21	141	182	43	163	388	793
February	162	364	753	208	17	25	139	164	38	158	360	748
March	180	395	817	226	18	35	143	172	43	176	391	813
April	172	381	814	209	17	40	167	168	42	170	380	812
May	183	398	807	188	18	43	160	173	42	185	400	808
June	184	397	773	190	17	43	125	171	42	186	399	775
July	187	411	798	196	18	45	127	179	46	189	413	799
August	185	408	772	178	18	45	122	179	44	189	413	776
September	175	387	723	150	16	39	130	170	42	182	394	730
October	183	395	755	155	18	34	153	167	45	184	396	755
November	182	396	807	180	18	30	183	170	45	179	393	804
December	190	414	862	216	18	27	187	177	47	185	408	857
Total	2,161	4,751	9,487	2,321	212	426	1,777	2,071	518	2,145	4,734	9,471
2016 January	185	404	855	236	18	26	170	172	42	171	385	836
February	176	385	845	223	17	35	186	162	40	173	376	836
March	190	405	921	253	18	43	203	165	44	187	396	912
April	175	376	871	239	16	48	192	154	43	173	370	865
May	189	399	881	235	18	55	174	161	43	192	396	878
June	189	400	838	215	17	56	151	163	40	192	394	833
July	196	410	850	198	17	62	163	168	41	201	410	850
August	198	416	801	181	18	61	125	170	42	204	416	801
September	187	393	768	151	17	55	151	159	39	194	392	768
October	194	400	815	160	18	49	188	159	41	195	395	809
November	192	403	815	174	18	41	179	163	43	195	401	813
December	203	443	920	208	19	37	214	188	45	202	434	912
Total	2,275	4,833	10,181	2,472	210	570	2,096	1,983	503	2,279	4,765	10,112
2017 January	195	419	920	257	18	35	190	173	44	177	395	895
February	176	380	866	227	16	40	204	160	39	166	364	851
March	196	416	1,018	279	18	64	240	171	43	190	403	1,005
April	182	389	985	271	18	70	237	161	39	183	383	979
May	196	406	1,011	297	17	82	209	165	39	200	404	1,009
June	191	403	969	281	17	87	181	167	38	198	404	970
July	195	415	898	238	18	81	146	174	40	198	412	895
August	202	425	840	196	18	79	121	177	40	202	419	834
September	191	R 397	R 823	175	17	74	160	161	37	191	389	815
October	200	414	887	159	17	68	229	168	40	196	404	877
10-Month Total	1,925	4,064	9,216	2,379	175	680	1,918	1,677	400	1,901	3,978	9,130
2016 10-Month Total	1,880	3,987	8,445	2,091	173	491	1,703	1,632	415	1,882	3,929	8,387
2015 10-Month Total	1,790	3,941	7,818	1,925	176	370	1,407	1,724	426	1,782	3,933	7,810

<sup>a</sup> For hydroelectric power, geothermal, solar, wind, and biomass waste, production equals consumption. For biofuels, production equals total biomass inputs to the production of fuel ethanol and biodiesel. For wood, through 2015, production equals consumption; beginning in 2016, production equals consumption plus densified biomass exports.

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

<sup>c</sup> Wood and wood-derived fuels, biomass waste, and total biomass inputs to the production of fuel ethanol and biodiesel.

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

<sup>e</sup> Conventional hydroelectricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).

<sup>f</sup> Geothermal electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6), and geothermal heat pump and direct use energy.

<sup>g</sup> Solar photovoltaic (PV) and solar thermal electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6), and solar thermal direct use energy.

<sup>h</sup> Wind electricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).

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

<sup>j</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>k</sup> Fuel ethanol (minus denaturant) and biodiesel consumption, plus losses and co-products from the production of fuel ethanol and biodiesel.

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

Notes: • Most data for the residential, commercial, industrial, and transportation sectors are estimates. See notes and sources for Tables 10.2a and 10.2b. • See Note, "Renewable Energy Production and Consumption," at end of section.

• Totals may not equal sum of components due to independent rounding.

• Geographic coverage is the 50 states and the District of Columbia.

Web Page: See <http://www.eia.gov/totalenergy/data/monthly/#Renewable> (Excel and CSV files) for all available annual data beginning in 1949 and monthly data beginning in 1973.

Sources: • **Production:** Tables 10.2a–10.4 and U.S. Energy Information Administration, Form EIA-63C, "Densified Biomass Fuel Report."

• **Consumption:** Tables 10.2a–10.2c.