

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

	Production ^a			Consumption								Total Renewable Energy
	Biomass		Total Renewable Energy ^d	Hydroelectric Power ^e	Geothermal ^f	Solar ^g	Wind ^h	Biomass				
	Bio-fuels ^b	Total ^c						Wood ⁱ	Waste ^j	Bio-fuels ^k	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	3,046	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	184	406	861	237	19	27	173	172	44	172	388	844
February	175	383	852	225	18	38	188	160	41	174	375	844
March	189	403	924	252	19	45	205	164	44	188	395	916
April	174	377	875	237	18	50	193	154	44	173	372	870
May	188	398	887	236	19	58	175	160	43	191	395	883
June	188	403	845	213	18	59	152	163	43	191	397	839
July	195	412	856	198	19	64	164	168	45	201	414	858
August	197	416	804	180	19	62	126	168	45	204	417	804
September	186	392	773	152	19	57	153	159	41	192	391	772
October	192	399	819	161	19	50	190	158	43	193	394	813
November	191	401	817	175	19	42	180	162	43	196	400	817
December	202	427	908	210	20	37	214	172	45	201	419	900
Total	2,262	4,816	10,220	2,477	226	587	2,114	1,959	522	2,275	4,756	10,161
2017 January	193	416	920	258	20	36	190	170	47	177	393	897
February	174	376	866	229	18	41	202	155	42	165	362	852
March	196	417	1,023	281	20	66	239	169	45	190	404	1,010
April	182	388	988	272	19	72	237	158	42	183	383	983
May	196	405	1,014	299	19	84	208	162	41	200	403	1,013
5-Month Total	942	2,002	4,811	1,341	95	298	1,075	814	216	915	1,945	4,754
2016 5-Month Total	910	1,967	4,399	1,188	93	217	934	810	217	898	1,925	4,357
2015 5-Month Total	875	1,942	3,998	1,056	89	163	749	858	208	852	1,918	3,975

^a 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.

^b Total biomass inputs to the production of fuel ethanol and biodiesel.

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

^d Hydroelectric power, geothermal, solar, wind, and biomass.

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

^f 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.

^g 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.

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

ⁱ Wood and wood-derived fuels.

^j 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).

^k Fuel ethanol (minus denaturant) and biodiesel consumption, plus losses and co-products from the production of fuel ethanol and biodiesel.

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.