

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	4,452	8,212	2,539	208	90	923	2,116	468	1,821	4,405	8,166
2011 Total	2,029	4,630	9,224	3,103	212	111	1,168	2,139	462	1,933	4,534	9,128
2012 Total	1,929	4,529	8,866	2,629	212	157	1,340	2,133	467	1,892	4,492	8,829
2013 Total	1,981	4,824	9,426	2,562	214	225	1,601	2,347	496	2,007	4,850	9,452
2014 Total	2,103	5,029	9,774	2,467	214	337	1,728	2,410	516	2,067	4,992	9,738
2015 Total	2,161	4,914	9,650	2,321	212	426	1,777	2,235	518	2,145	4,898	9,634
2016 January	185	417	867	236	18	26	170	184	42	171	398	848
February	176	396	857	223	17	35	186	173	40	173	387	848
March	190	417	933	253	18	43	203	177	44	187	408	924
April	175	388	883	239	16	48	192	166	43	173	382	877
May	189	411	894	235	18	55	174	173	43	192	408	891
June	189	412	850	215	17	56	151	175	40	192	407	845
July	196	422	862	198	17	61	163	181	41	201	423	863
August	198	429	814	181	18	61	125	183	42	204	429	813
September	187	405	780	151	17	55	151	172	39	194	404	780
October	194	412	827	160	18	49	188	172	41	195	407	822
November	192	415	827	174	18	41	179	175	43	195	413	825
December	203	456	933	208	19	37	214	200	45	202	447	924
Total	2,275	4,982	10,328	2,472	210	569	2,096	2,131	503	2,279	4,913	10,260
2017 January	R 197	R 432	R 933	257	18	35	192	184	44	R 181	R 409	R 911
February	R 177	R 391	R 878	227	16	39	205	169	39	166	R 375	R 862
March	R 197	R 428	R 1,031	279	18	64	241	181	43	R 191	R 415	R 1,018
April	R 183	R 400	R 996	271	18	70	238	171	39	R 184	R 395	R 991
May	R 197	R 417	R 1,023	297	17	82	209	176	39	R 201	R 416	R 1,022
June	R 192	R 414	R 981	281	17	87	182	177	38	R 199	414	981
July	R 196	R 427	R 909	238	18	81	146	185	40	R 197	R 422	R 904
August	R 203	R 437	R 851	196	18	79	121	187	40	R 205	R 432	R 847
September	R 192	R 408	R 834	175	17	74	159	171	37	R 190	R 398	825
October	R 201	R 425	R 898	159	17	68	229	178	40	R 197	R 415	888
November	R 203	R 428	891	183	18	47	215	177	41	R 194	R 412	R 875
December	R 205	R 444	R 926	208	18	46	210	188	42	R 196	R 425	R 907
Total	R 2,344	R 5,050	R 11,153	2,770	211	774	2,347	2,145	482	R 2,302	R 4,929	R 11,032
2018 January	198	435	984	235	18	49	248	188	43	190	421	970
February	182	404	935	236	17	57	221	173	40	164	377	908
March	200	433	1,016	239	18	75	252	184	43	190	417	1,000
April	190	414	1,020	255	16	87	247	176	41	178	395	1,001
May	201	429	1,043	280	18	100	216	183	40	200	423	1,037
June	200	427	1,030	253	18	107	225	182	38	194	414	1,017
6-Month Total	1,172	2,542	6,028	1,498	106	474	1,409	1,087	244	1,116	2,447	5,933
2017 6-Month Total	1,144	2,482	5,843	1,611	105	378	1,267	1,058	243	1,123	2,425	5,786
2016 6-Month Total	1,104	2,442	5,285	1,401	103	264	1,075	1,049	252	1,089	2,390	5,233

^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), biodiesel, and other renewable fuels 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.