

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	NA	1,562	2,978
1955 Total	NA	1,424	2,784	1,360	NA	NA	NA	1,424	NA	NA	NA	1,424	2,784
1960 Total	NA	1,320	2,928	1,608	(s)	NA	NA	1,320	NA	NA	NA	1,320	2,928
1965 Total	NA	1,335	3,396	2,059	2	NA	NA	1,335	NA	NA	NA	1,335	3,396
1970 Total	NA	1,431	4,070	2,634	6	NA	NA	1,429	2	NA	NA	1,431	4,070
1975 Total	NA	1,499	4,687	3,155	34	NA	NA	1,497	2	NA	NA	1,499	4,687
1980 Total	NA	2,475	5,428	2,900	53	NA	NA	2,474	2	NA	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	195	430	932	257	18	35	192	184	44	177	405	907	
February	176	389	877	227	16	39	205	169	39	166	374	861	
March	196	427	1,030	279	18	64	241	181	43	190	414	1,017	
April	182	399	995	271	18	70	238	171	39	183	393	990	
May	196	417	1,022	297	17	82	209	176	39	200	415	1,020	
June	191	413	980	281	17	87	182	177	38	198	414	981	
July	195	426	908	238	18	81	146	185	40	198	423	905	
August	202	436	850	196	18	79	121	187	40	202	430	844	
September	191	407	833	175	17	74	159	171	37	191	399	825	
October	200	424	897	159	17	68	229	178	40	196	414	888	
November	202	R 427	R 891	183	18	47	215	177	41	193	411	874	
December	204	R 443	R 925	208	18	46	210	188	42	191	421	903	
Total	2,332	R 5,038	R 11,140	2,770	211	774	2,347	2,145	482	2,286	4,913	11,016	
2018 January	198	R 435	R 984	235	18	49	248	188	43	190	421	970	
February	182	R 404	R 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	
3-Month Total	581	1,272	2,936	710	53	180	721	545	125	544	1,215	2,879	
2017 3-Month Total	567	1,246	2,838	763	53	138	638	534	126	533	1,193	2,785	
2016 3-Month Total	552	1,230	2,657	712	52	104	559	535	126	532	1,193	2,620	

^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.

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.