

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

	Production ^a				Consumption								
	Biomass			Total Renewable Energy ^e	Hydroelectric Power ^f	Geothermal ^g	Solar ^h	Wind ⁱ	Biomass				Total Renewable Energy
	Wood ^b	Bio-fuels ^c	Total ^d						Wood ^j	Waste ^k	Bio-fuels ^l	Total	
1950 Total	1,562	NA	1,562	1,907	344	NA	NA	NA	1,562	NA	NA	1,562	1,907
1955 Total	1,424	NA	1,424	1,821	397	NA	NA	NA	1,424	NA	NA	1,424	1,821
1960 Total	1,320	NA	1,320	1,830	510	(s)	NA	NA	1,320	NA	NA	1,320	1,830
1965 Total	1,335	NA	1,335	2,008	672	1	NA	NA	1,335	NA	NA	1,335	2,008
1970 Total	1,429	NA	1,431	2,289	856	2	NA	NA	1,429	2	NA	1,431	2,289
1975 Total	1,497	NA	1,499	2,544	1,034	11	NA	NA	1,497	2	NA	1,499	2,544
1980 Total	2,474	NA	2,475	3,445	953	17	NA	NA	2,474	2	NA	2,475	3,445
1985 Total	2,687	93	3,016	4,018	970	32	(s)	(s)	2,687	236	93	3,016	4,018
1990 Total	2,216	111	2,735	3,863	999	63	56	10	2,216	408	111	2,735	3,863
1995 Total	2,370	198	3,099	4,295	1,061	60	64	11	2,370	531	200	3,101	4,297
2000 Total	2,262	233	3,006	4,093	940	69	59	19	2,262	511	236	3,008	4,096
2005 Total	2,137	561	3,101	4,220	922	84	52	61	2,137	403	574	3,114	4,233
2010 Total	2,217	1,868	4,553	5,943	888	111	68	323	2,217	468	1,821	4,506	5,896
2011 Total	2,213	2,037	4,712	6,404	1,090	116	76	410	2,213	462	1,941	4,616	6,308
2012 Total	2,151	1,936	4,554	6,187	943	117	94	480	2,151	467	1,899	4,517	6,151
2013 Total	2,338	2,000	4,835	6,561	916	117	120	573	2,338	496	2,026	4,861	6,587
2014 Total	2,398	2,135	5,049	6,833	885	118	161	620	2,398	516	2,099	5,013	6,796
2015 Total	2,305	2,201	5,025	6,840	850	118	197	651	2,305	518	2,185	5,008	6,823
2016 Total	2,290	2,329	5,122	7,180	914	117	252	774	2,217	503	2,333	5,053	7,112
2017 Total	2,254	2,407	5,156	7,498	1,025	118	331	868	2,176	495	2,364	5,035	7,377
2018 Total	2,348	2,471	5,306	7,740	998	118	388	930	2,254	487	2,355	5,096	7,530
2019 Total	2,333	2,432	5,207	7,750	982	116	435	1,010	2,229	442	2,376	5,048	7,591
2020 Total	2,066	2,194	4,700	7,460	973	118	516	1,153	1,960	440	2,136	4,535	7,296
2021 Total	2,111	2,374	4,916	7,819	858	118	636	1,290	1,992	430	2,331	4,753	7,656
2022 Total	2,273	2,511	5,196	8,450	869	118	784	1,482	2,135	412	2,433	4,980	8,233
2023 Total	2,103	2,705	5,202	8,501	836	119	907	1,437	1,968	394	2,659	5,021	8,320
2024 January	173	226	434	691	74	10	55	119	165	35	212	411	668
February	166	227	425	713	71	9	67	140	154	32	223	410	698
March	174	241	448	779	80	10	88	154	161	33	232	427	758
April	166	223	420	764	71	10	102	161	155	31	222	408	752
May	170	232	435	778	84	10	116	134	158	33	242	433	776
June	169	238	437	778	76	9	123	132	157	30	235	422	763
July	173	252	457	760	73	10	124	97	162	32	252	446	749
August	176	250	458	759	70	10	122	100	163	32	242	437	738
September	169	236	435	703	54	9	105	100	157	31	231	418	686
October	164	245	441	737	52	10	99	135	153	32	243	428	724
November	169	251	452	727	57	10	72	137	157	32	235	425	701
December	178	255	465	743	67	10	66	135	166	33	236	435	713
Total	2,046	2,875	5,308	8,933	829	116	1,138	1,542	1,909	387	2,806	5,101	8,726
2025 January	177	233	443	753	73	10	78	149	165	33	208	406	716
February	160	212	402	695	67	9	83	134	148	30	199	377	670
March	176	232	441	816	77	10	116	173	163	33	214	410	785
April	162	218	411	787	78	10	132	157	151	31	212	393	769
May	170	234	434	797	83	10	144	126	158	31	212	401	764
June	170	235	435	794	76	10	153	122	158	30	209	397	757
July	180	243	453	799	68	10	159	109	166	30	220	416	762
August	177	237	445	768	69	10	151	93	165	30	218	413	736
September	172	233	434	717	52	10	134	88	160	29	211	400	683
October	171	248	450	769	56	10	119	135	158	31	226	416	736
November	169	243	443	746	63	10	91	140	156	31	212	400	703
December	175	249	457	787	82	10	78	161	163	32	228	423	753
Total	2,058	2,817	5,247	9,229	843	117	1,438	1,585	1,912	372	2,569	4,853	8,835
2026 January	172	232	436	781	95	10	88	152	159	31	199	390	735
February	154	220	403	726	77	9	101	135	145	29	194	368	690
March	166	248	446	865	92	10	139	178	155	32	225	412	831
April	154	233	416	820	77	9	150	168	140	30	216	386	790
May	169	257	456	855	78	10	172	140	157	30	234	420	820
5-Month Total	815	1,190	2,157	4,047	418	48	650	773	755	152	1,069	1,976	3,866
2025 5-Month Total	845	1,129	2,132	3,848	377	49	552	738	785	157	1,045	1,987	3,703
2024 5-Month Total	849	1,150	2,163	3,725	379	49	427	707	794	164	1,131	2,089	3,651

^a For hydroelectric power, geothermal, solar, wind, and biomass waste, production equals consumption.

^b Wood and wood-derived fuels. Through 2015, wood production equals consumption. Beginning in 2016, wood production equals consumption plus densified biomass exports.

^c Total biomass inputs to the production of fuel ethanol and biodiesel. Beginning in 2011, also includes production of renewable diesel fuel. Beginning in 2014, also includes production of other biofuels.

^d Includes biomass waste.

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

^f Conventional hydroelectricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6).

^g Geothermal electricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6), and geothermal heat pump and direct use energy.

^h Solar photovoltaic (PV) and solar thermal electricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6), and solar thermal direct use energy.

ⁱ Wind electricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6).

^j Wood and wood-derived fuels.

^k 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).

^l Fuel ethanol (minus denaturant), biodiesel, renewable diesel fuel, and other biofuels 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: • Production data are estimates. Consumption data are estimates, except for hydroelectric power in 1949–1978 and 1989 forward, and wind. • 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–10.4c and U.S. Energy Information Administration, Form EIA-63C, "Densified Biomass Fuel Report."

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