Table 10.1 Renewable Energy Production and Consumption by Source

(Trillion Btu)

	Productiona			Consumption								
	Biomass		Total					Biomass				Total
	Bio- fuels ^b	Total ^c	Renew- able Energy ^d	Hydro- electric Power ^e	Geo- thermal ^f	Solar ^g	Wind ^h	Wood ⁱ	Waste ^j	Bio- fuels ^k	Total	Renew- able Energy
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 1970 Total	NA NA NA	1,335 1,431 1,499	3,396 4,070 4,687	2,059 2,634	(s) 2 6 34	NA NA NA	NA NA NA	1,335 1,429 1,497	NA 2 2	NA NA NA	1,335 1,431 1,499	3,396 4,070
1975 Total 1980 Total 1985 Total	NA 93	2,475 3,016	5,428 6,084	3,155 2,900 2,970	53 97	NA (s) 59	NA (s) 29	2,474 2,687	2 236	NA 93	2,475 3,016	4,687 5,428 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 2010 Total	1,570 1,868 2,029	3,953 4,316	7,620 8,077	2,669 2,539	200 208 212	78 90 111	721 923 1.168	1,931 1,981 2,010	452 468 462	1,553 1,821	3,936 4,270	7,604 8,030
2011 Total 2012 Total 2013 Total	1,929 1,981	4,501 4,406 4,647	9,095 8,743 9,249	3,103 2,629 2,562	212 212 214	157 225	1,168 1,340 1,601	2,010 2,010 2,170	467 496	1,933 1,892 R 2,007	4,405 4,369 R 4,673	8,999 8,706 ^R 9,275
2014 January	170	404	815	206	18	17	170	190	45	163	397	808
February	153	367	700	165	16	18	133	173	41	150	364	697
March	173	406	850	231	18	26	169	189	45	167	401	845
April	170	392	858	242	18	29	177	179	44	167	390	856
May	178	403	855	252	18	33	148	182	43	176	401	853
June July	177 183	406 420	853 820	245 232	18 18	35 34 35	150 116	186 192	42 45	173 180	402 417	849 817
August September October	179 173 179	416 396 407	754 709 758	188 153 163	18 18 18	33 31	97 110 138	193 182 186	43 41 42	182 172 180	418 394 408	756 708 759
November	177	403	803	177	18	25	179	185	42	173	399	799
December	191	428	820	212	18	21	140	194	44	183	420	812
Total	2,103	4,849	9,595	2,467	214	337	1,728	2,230	516	2,067	4,812	9,558
2015 January	178	^R 401	^R 806	R 225	^R 18	^R 21	^R 141	^R 179	^R 43	163	^R 386	^R 792
February	162	363	^R 751	R 208	^R 17	^R 25	^R 139	162	39	158	358	^R 747
March	180	R 393	R 815	R 226	^R 18	R 35	R 143	R 170	43	176	R 389	^R 811
April	172	R 380	R 812	R 209	^R 17	R 40	R 167	R 165	R 42	170	R 378	^R 810
May	183	396	R 805	R 188	^R 18	R 43	R 160	170	R 43	185	398	^R 807
June July	184 187	R 395 R 410	^R 771 ^R 796	R 190 R 196	R 17 R 18 R 18	R 43 R 45 R 45	R 125 R 127 R 122	^R 168 ^R 176	42 R 46	186 189	^R 397 411	^R 773 ^R 797
August September October	185 175 183	R 406 R 385 R 393	R 770 R 721 R 753	R 178 R 150 R 155	17 18	R 39 R 34	R 130 R 153	^R 177 ^R 168 ^R 165	R 44 R 42 R 45	189 182 184	^R 411 ^R 392 ^R 394	^R 774 ^R 728 ^R 754
November	182	R 394	R 806	R 180	18	R 30	R 183	R 167	R 45	179	R 391	R 802
December	190	R 412	R 860	R 216	^R 18	R 27	R 187	175	R 47	185	R 406	R 855
Total	2,161	R 4,727	R 9,466	R 2,321	^R 213	R 427	R 1,777	R 2,043	R 522	2,145	R 4,711	R 9,450
2016 January	184	^R 401	R 856	R 236	19	R 27	R 173	171	R 45	172	R 388	R 843
	175	^R 376	R 845	R 225	18	R 37	R 188	159	41	174	R 375	R 844
March April	189 174 188	R 397 R 372 R 391	R 916 R 868 R 880	R 252 R 237 R 236	19 18 20	R 45 R 49 R 57	R 203 R 192 R 175	163 R 153 R 160	44 R 45 R 44	188 173 191	R 395 R 372 R 394	R 914 R 868 R 883
May June July	188 195	R 394 R 407	^R 836 ^R 852	R 213 R 198	18 19	R 58 R 63	^R 152 ^R 164	^R 162 ^R 167	R 44 R 45	191 201	R 396 R 413	R 838 R 858
August	197	R 410	^R 797	R 180	19	^R 61	R 126	167	^R 45	204	R 417	R 804
September	186	385	766	152	19	56	153	158	41	192	391	772
9-Month Total	1,677	3,533	7,614	1,930	170	455	1,526	1,462	394	1,685	3,542	7,623
2015 9-Month Total	1,607	3,528	7,047	1,770	159	336	1,254	1,536	385	1,598	3,519	7,038
2014 9-Month Total	1,556	3,610	7,214	1,914	160	260	1,270	1,666	388	1,531	3,585	7,188

a Production equals consumption for all renewable energy sources except

non-renewable waste (municipal solid waste from non-biogenic sources, and tire-derived fuels).

**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: Tables 10.2a–10.5.

a Production equals consumption for all renewable consumptions of the lethanol and biodiesel.
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.
c Conventional hydroelectricity net generation (converted to Btu by multiplying by the total fossil fuels heat rate factors in Table A6).
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.

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