

**Table 10.2b Renewable Energy Consumption: Industrial Sector**  
(Trillion Btu)

	Industrial Sector <sup>a</sup>									
	Hydro-electric Power <sup>b</sup>	Geo-thermal <sup>c</sup>	Solar <sup>d</sup>	Wind <sup>e</sup>	Biomass					Total
					Wood <sup>f</sup>	Waste <sup>g</sup>	Fuel Ethanol <sup>h,i</sup>	Losses and Co-products <sup>j</sup>	Total	
<b>1950 Total</b> .....	17	NA	NA	NA	532	NA	NA	NA	532	549
<b>1955 Total</b> .....	11	NA	NA	NA	631	NA	NA	NA	631	642
<b>1960 Total</b> .....	12	NA	NA	NA	680	NA	NA	NA	680	692
<b>1965 Total</b> .....	11	NA	NA	NA	855	NA	NA	NA	855	866
<b>1970 Total</b> .....	11	NA	NA	NA	1,019	NA	NA	NA	1,019	1,030
<b>1975 Total</b> .....	11	NA	NA	NA	1,063	NA	NA	NA	1,063	1,074
<b>1980 Total</b> .....	11	NA	NA	NA	1,600	NA	NA	NA	1,600	1,611
<b>1985 Total</b> .....	11	NA	NA	NA	1,645	230	1	42	1,918	1,928
<b>1990 Total</b> .....	10	2	(s)	—	1,442	192	1	49	1,684	1,696
<b>1995 Total</b> .....	18	3	(s)	—	1,652	195	2	86	1,934	1,955
<b>2000 Total</b> .....	14	4	(s)	—	1,636	145	1	99	1,881	1,900
<b>2005 Total</b> .....	11	4	(s)	—	1,452	148	7	227	1,834	1,849
<b>2010 Total</b> .....	6	4	1	—	1,409	168	17	727	2,320	2,331
<b>2011 Total</b> .....	6	4	1	(s)	1,438	165	17	756	2,375	2,387
<b>2012 Total</b> .....	8	4	2	(s)	1,462	159	17	711	2,349	2,363
<b>2013 Total</b> .....	12	4	3	(s)	1,489	187	18	714	2,407	2,427
<b>2014 Total</b> .....	4	4	4	(s)	1,495	190	14	766	2,466	2,478
<b>2015 Total</b> .....	5	4	5	(s)	1,476	190	18	791	2,474	2,489
<b>2016 Total</b> .....	4	4	7	(s)	1,474	174	18	821	2,487	2,503
<b>2017 Total</b> .....	5	4	8	(s)	1,442	168	18	847	2,475	2,493
<b>2018 Total</b> .....	4	4	9	(s)	1,432	165	19	855	2,471	2,489
<b>2019 Total</b> .....	4	4	11	(s)	1,407	156	19	835	2,416	2,435
<b>2020 Total</b> .....	3	4	12	R (s)	1,356	160	19	735	2,270	R 2,290
<b>2021 Total</b> .....	3	4	14	(s)	1,366	161	19	789	2,336	2,357
<b>2022 January</b> .....	(s)	(s)	1	(s)	114	14	2	71	201	202
<b>February</b> .....	(s)	(s)	1	(s)	103	13	1	62	180	182
<b>March</b> .....	(s)	(s)	1	(s)	110	15	2	70	196	198
<b>April</b> .....	(s)	(s)	1	(s)	109	14	2	64	188	190
<b>May</b> .....	(s)	(s)	2	(s)	112	14	2	69	197	199
<b>June</b> .....	(s)	(s)	2	(s)	110	12	2	69	193	195
<b>July</b> .....	(s)	(s)	2	(s)	114	12	2	70	198	200
<b>August</b> .....	(s)	(s)	2	(s)	112	13	2	68	194	196
<b>September</b> .....	(s)	(s)	1	(s)	105	12	2	60	178	180
<b>October</b> .....	(s)	(s)	1	(s)	105	14	2	70	190	192
<b>November</b> .....	(s)	(s)	1	(s)	107	14	2	70	192	193
<b>December</b> .....	(s)	(s)	1	(s)	109	14	2	66	191	193
<b>Total</b> .....	3	4	15	(s)	1,309	161	20	808	2,297	2,320
<b>2023 January</b> .....	(s)	(s)	1	(s)	110	14	2	69	195	196
<b>February</b> .....	(s)	(s)	1	(s)	97	12	1	62	173	175
<b>March</b> .....	(s)	(s)	1	(s)	107	14	2	68	189	192
<b>April</b> .....	(s)	(s)	2	(s)	98	13	2	64	177	179
<b>May</b> .....	(s)	(s)	2	(s)	104	13	2	68	188	190
<b>June</b> .....	(s)	(s)	2	(s)	97	12	2	69	180	182
<b>July</b> .....	(s)	(s)	2	(s)	103	12	2	71	187	189
<b>August</b> .....	(s)	(s)	2	(s)	105	12	2	69	187	189
<b>September</b> .....	(s)	(s)	1	(s)	101	12	2	67	181	183
<b>October</b> .....	(s)	(s)	1	(s)	100	13	2	70	186	187
<b>November</b> .....	(s)	(s)	1	(s)	104	13	2	70	189	190
<b>December</b> .....	(s)	(s)	1	(s)	107	14	2	74	197	198
<b>Total</b> .....	3	4	16	(s)	1,235	153	20	819	2,228	2,251
<b>2024 January</b> .....	(s)	(s)	1	(s)	105	14	2	68	187	189
<b>February</b> .....	(s)	(s)	1	(s)	95	13	2	69	178	180
<b>March</b> .....	(s)	(s)	2	(s)	104	13	2	73	192	194
<b>April</b> .....	(s)	(s)	2	(s)	102	13	2	65	181	184
<b>May</b> .....	(s)	(s)	2	(s)	103	14	2	70	188	191
<b>June</b> .....	(s)	(s)	2	(s)	97	12	2	69	179	181
<b>July</b> .....	(s)	(s)	2	(s)	101	12	2	75	189	192
<b>August</b> .....	(s)	(s)	2	(s)	105	12	2	74	193	195
<b>September</b> .....	(s)	(s)	2	(s)	102	12	2	69	184	187
<b>October</b> .....	(s)	(s)	1	(s)	99	13	2	73	187	189
<b>10-Month Total</b> ..	3	4	16	(s)	1,012	126	17	704	1,859	1,881
<b>2023 10-Month Total</b> ...	2	3	14	(s)	1,023	127	17	675	1,842	1,863
<b>2022 10-Month Total</b> ...	3	3	13	(s)	1,093	133	16	672	1,914	1,934

<sup>a</sup> Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note 2, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

<sup>b</sup> Conventional hydroelectricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6).

<sup>c</sup> Geothermal heat pump and direct use energy.

<sup>d</sup> Solar photovoltaic (PV) electricity net generation in the industrial sector (converted to Btu by multiplying by the heat content of electricity in Table A6), both utility-scale and small-scale. See Table 10.5.

<sup>e</sup> Wind electricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6).

<sup>f</sup> Wood and wood-derived fuels.

<sup>g</sup> 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).

<sup>h</sup> The fuel ethanol (minus denaturant) portion of motor fuels, such as E10, consumed by the industrial sector.

<sup>i</sup> There is a discontinuity in this time series between 2014 and 2015 due to a

change in the method for allocating motor gasoline consumption to the end-use sectors. Beginning in 2015, the commercial and industrial sector shares of fuel ethanol consumption are larger than in 2014, while the transportation sector share is smaller.

<sup>j</sup> Losses and co-products from the production of fuel ethanol and biodiesel. Does not include natural gas, electricity, and other non-biomass energy used in the production of fuel ethanol and biodiesel—these are included in the industrial sector consumption statistics for the appropriate energy source.

R=Revised. NA=Not available. —=No data reported. (s)=Less than 0.5 trillion Btu.

Notes: • Industrial sector data are estimates, except for hydroelectric power in 1949–1978 and 1989 forward, and wind. • 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: See end of section.