

**Table 10.2a Renewable Energy Consumption: Residential and Commercial Sectors**  
(Trillion Btu)

	Residential Sector				Commercial Sector <sup>a</sup>								
	Geo-thermal <sup>b</sup>	Solar <sup>c</sup>	Biomass	Total	Hydro-electric Power <sup>e</sup>	Geo-thermal <sup>f</sup>	Solar <sup>g</sup>	Wind <sup>h</sup>	Biomass				Total
			Wood <sup>d</sup>						Wood <sup>d</sup>	Waste <sup>i</sup>	Fuel Ethanol <sup>j,k</sup>	Total	
1950 Total .....	NA	NA	1,006	1,006	NA	NA	NA	NA	19	NA	NA	19	19
1955 Total .....	NA	NA	775	775	NA	NA	NA	NA	15	NA	NA	15	15
1960 Total .....	NA	NA	627	627	NA	NA	NA	NA	12	NA	NA	12	12
1965 Total .....	NA	NA	468	468	NA	NA	NA	NA	9	NA	NA	9	9
1970 Total .....	NA	NA	401	401	NA	NA	NA	NA	8	NA	NA	8	8
1975 Total .....	NA	NA	425	425	NA	NA	NA	NA	8	NA	NA	8	8
1980 Total .....	NA	NA	850	850	NA	NA	NA	NA	21	NA	NA	21	21
1985 Total .....	NA	NA	1,010	1,010	NA	NA	NA	NA	24	NA	(s)	24	24
1990 Total .....	6	55	580	640	(s)	3	(s)	—	66	28	(s)	94	97
1995 Total .....	7	63	520	589	(s)	5	(s)	—	72	40	(s)	113	118
2000 Total .....	9	57	420	486	(s)	8	(s)	—	71	47	(s)	119	127
2005 Total .....	16	49	430	495	(s)	14	1	—	70	34	1	105	120
2010 Total .....	37	59	541	636	(s)	19	4	(s)	72	36	3	111	134
2011 Total .....	40	62	524	626	(s)	20	7	(s)	69	43	3	115	141
2012 Total .....	40	66	438	544	(s)	20	11	(s)	61	45	3	108	139
2013 Total .....	40	72	572	683	(s)	20	15	(s)	70	47	3	120	155
2014 Total .....	40	79	579	697	(s)	20	19	(s)	73	47	4	124	163
2015 Total .....	40	87	513	639	(s)	20	21	(s)	73	47	<sup>k</sup> 26	146	187
2016 Total .....	40	100	445	584	1	20	23	(s)	74	48	26	148	191
2017 Total .....	40	113	430	582	1	20	28	(s)	74	48	25	146	195
2018 Total .....	40	123	525	688	1	20	35	1	74	47	25	146	203
2019 Total .....	40	136	546	721	1	21	40	1	74	39	26	139	201
2020 Total .....	40	151	345	536	1	21	46	1	73	38	26	137	205
2021 Total .....	40	169	344	553	1	21	54	1	73	39	27	139	215
2022 January .....	3	11	36	50	(s)	2	4	(s)	6	6	2	15	20
February .....	3	12	32	47	(s)	2	4	(s)	6	6	2	14	19
March .....	3	17	36	56	(s)	2	5	(s)	6	6	3	15	22
April .....	3	18	35	56	(s)	2	6	(s)	6	6	3	15	22
May .....	3	20	36	56	(s)	2	6	(s)	6	6	3	15	23
June .....	3	20	35	58	(s)	2	6	(s)	6	6	3	15	24
July .....	3	21	36	60	(s)	2	7	(s)	6	7	3	15	24
August .....	3	20	36	59	(s)	2	6	(s)	6	6	3	16	24
September .....	3	18	35	56	(s)	2	6	(s)	6	6	3	15	22
October .....	3	17	36	56	(s)	2	5	(s)	6	6	3	15	22
November .....	3	13	35	51	(s)	2	4	(s)	6	6	3	15	21
December .....	3	12	36	52	(s)	2	4	(s)	6	6	3	15	20
Total .....	40	200	422	662	1	20	63	1	73	75	32	180	263
2023 January .....	3	12	38	54	(s)	2	4	(s)	6	6	3	15	21
February .....	3	14	35	51	(s)	2	4	(s)	5	5	2	13	19
March .....	3	19	38	60	(s)	2	6	(s)	6	6	3	15	22
April .....	3	21	37	62	(s)	2	7	(s)	6	6	3	14	22
May .....	3	24	38	66	(s)	2	7	(s)	6	6	3	15	24
June .....	3	23	37	64	(s)	2	7	(s)	6	6	3	15	24
July .....	3	24	38	66	(s)	2	7	(s)	6	6	3	15	24
August .....	3	24	38	66	(s)	2	7	(s)	6	6	3	15	24
September .....	3	21	37	61	(s)	2	6	(s)	6	6	3	14	22
October .....	3	20	38	61	(s)	2	5	(s)	6	6	3	15	22
November .....	3	16	37	56	(s)	2	4	(s)	6	6	3	15	21
December .....	3	14	38	56	(s)	2	4	(s)	6	7	3	15	21
Total .....	40	233	450	723	1	20	69	(s)	72	72	32	176	267
2024 January .....	3	15	34	52	(s)	2	4	(s)	6	6	2	15	21
February .....	3	17	32	52	NM	2	5	(s)	6	6	2	14	20
March .....	3	22	34	59	(s)	2	7	(s)	6	6	3	14	23
April .....	3	24	33	61	(s)	2	7	(s)	6	6	2	14	23
May .....	3	27	34	64	NM	2	8	(s)	6	6	3	15	25
June .....	3	27	33	63	(s)	2	8	(s)	6	6	3	14	24
July .....	3	27	34	65	NM	2	8	(s)	6	6	3	15	25
August .....	3	26	34	64	(s)	2	8	(s)	6	6	3	15	25
September .....	3	23	33	60	(s)	2	7	(s)	6	5	3	14	23
October .....	3	21	34	59	NM	2	6	(s)	6	6	3	14	22
10-Month Total ...	33	229	335	598	1	16	69	(s)	60	58	27	144	231
2023 10-Month Total ...	33	203	375	611	1	16	61	(s)	60	60	27	146	225
2022 10-Month Total ...	33	174	352	559	1	16	55	(s)	61	63	26	150	223

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

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

<sup>c</sup> Small-scale solar photovoltaic (PV) electricity generation in the residential sector (converted to Btu by multiplying by the heat content of electricity in Table A6) and small-scale solar thermal energy in the residential, commercial, and industrial sectors. See Table 10.5.

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

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

<sup>f</sup> Geothermal heat pump and direct use energy. Beginning in December 2018, also includes geothermal electricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6).

<sup>g</sup> Solar photovoltaic (PV) electricity net generation in the commercial 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>h</sup> Wind electricity net generation (converted to Btu by multiplying by the heat content of electricity in Table A6).

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

<sup>k</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.

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

Notes: • Residential sector data are estimates. Commercial sector data are estimates, except for hydroelectric power, wind, and biomass waste. • 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.