

Table 8. U.S. Renewable Energy Consumption (Quadrillion Btu)
 U.S. Energy Information Administration | Short-Term Energy Outlook - May 2024

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
Electric Power Sector															
Geothermal	0.014	0.014	0.014	0.014	0.013	0.012	0.013	0.014	0.012	0.010	0.014	0.014	0.056	0.053	0.050
Hydroelectric Power (a)	0.208	0.219	0.200	0.188	0.217	0.237	0.210	0.202	0.233	0.266	0.215	0.199	0.814	0.866	0.912
Solar (b)	0.100	0.167	0.177	0.114	0.131	0.242	0.253	0.159	0.180	0.297	0.314	0.191	0.558	0.784	0.982
Waste Biomass (c)	0.043	0.041	0.042	0.041	0.042	0.041	0.041	0.041	0.041	0.040	0.041	0.041	0.167	0.165	0.162
Wood Biomass	0.044	0.040	0.045	0.033	0.041	0.042	0.051	0.041	0.044	0.041	0.051	0.039	0.162	0.175	0.175
Wind	0.430	0.350	0.289	0.382	0.420	0.383	0.310	0.410	0.435	0.395	0.320	0.422	1.450	1.522	1.572
Subtotal	0.838	0.830	0.766	0.773	0.864	0.956	0.879	0.866	0.945	1.049	0.954	0.906	3.207	3.565	3.854
Industrial Sector															
Biofuel Losses and Co-products (d)	0.199	0.202	0.206	0.214	0.206	0.208	0.209	0.210	0.205	0.208	0.208	0.212	0.821	0.833	0.834
Geothermal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.004	0.004
Hydroelectric Power (a)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.003	0.003	0.003
Solar (b)	0.003	0.005	0.005	0.003	0.004	0.005	0.005	0.004	0.004	0.006	0.006	0.004	0.016	0.017	0.019
Waste Biomass (c)	0.041	0.040	0.037	0.042	0.040	0.039	0.039	0.042	0.040	0.040	0.039	0.041	0.160	0.160	0.160
Wood Biomass	0.318	0.300	0.299	0.307	0.308	0.324	0.343	0.347	0.337	0.335	0.347	0.349	1.224	1.322	1.368
Subtotal (e)	0.568	0.553	0.554	0.573	0.564	0.583	0.602	0.610	0.593	0.595	0.606	0.614	2.249	2.359	2.407
Commercial Sector															
Geothermal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.020	0.020	0.020
Solar (b)	0.014	0.021	0.021	0.014	0.016	0.023	0.023	0.016	0.019	0.027	0.027	0.019	0.069	0.079	0.091
Waste Biomass (c)	0.017	0.017	0.018	0.018	0.017	0.017	0.018	0.018	0.017	0.017	0.018	0.018	0.071	0.071	0.071
Wood Biomass	0.020	0.020	0.021	0.021	0.020	0.020	0.021	0.021	0.020	0.020	0.021	0.021	0.082	0.082	0.082
Subtotal (e)	0.064	0.071	0.073	0.066	0.066	0.074	0.076	0.069	0.069	0.078	0.079	0.071	0.274	0.284	0.296
Residential Sector															
Geothermal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.040	0.040	0.040
Solar (f)	0.045	0.069	0.070	0.051	0.053	0.079	0.078	0.054	0.058	0.087	0.087	0.060	0.235	0.264	0.292
Wood Biomass	0.111	0.112	0.114	0.114	0.107	0.112	0.114	0.114	0.107	0.112	0.114	0.114	0.450	0.446	0.446
Subtotal	0.166	0.191	0.193	0.174	0.170	0.201	0.202	0.177	0.175	0.209	0.211	0.183	0.725	0.750	0.778
Transportation Sector															
Biodiesel, Renewable Diesel, and Other (g)	0.140	0.173	0.175	0.172	0.173	0.184	0.187	0.202	0.201	0.220	0.226	0.237	0.660	0.744	0.884
Ethanol (g)	0.268	0.284	0.286	0.286	0.268	0.285	0.290	0.285	0.269	0.288	0.289	0.286	1.125	1.129	1.132
Subtotal	0.408	0.457	0.462	0.458	0.440	0.469	0.476	0.487	0.470	0.508	0.515	0.523	1.785	1.873	2.015
All Sectors Total															
Biodiesel, Renewable Diesel, and Other (g)	0.140	0.173	0.175	0.172	0.173	0.184	0.187	0.202	0.201	0.220	0.226	0.237	0.660	0.744	0.884
Biofuel Losses and Co-products (d)	0.199	0.202	0.206	0.214	0.206	0.208	0.209	0.210	0.205	0.208	0.208	0.212	0.821	0.833	0.834
Ethanol (f)	0.281	0.298	0.299	0.300	0.280	0.299	0.303	0.299	0.281	0.301	0.302	0.300	1.177	1.181	1.184
Geothermal	0.030	0.029	0.030	0.030	0.030	0.028	0.029	0.030	0.028	0.026	0.030	0.030	0.120	0.117	0.114
Hydroelectric Power (a)	0.209	0.220	0.201	0.189	0.218	0.238	0.211	0.203	0.234	0.267	0.216	0.200	0.818	0.870	0.916
Solar (b)(f)	0.162	0.262	0.272	0.181	0.203	0.349	0.360	0.232	0.260	0.417	0.434	0.273	0.878	1.145	1.384
Waste Biomass (c)	0.102	0.098	0.097	0.101	0.100	0.097	0.098	0.101	0.098	0.097	0.098	0.101	0.398	0.396	0.393
Wood Biomass	0.493	0.472	0.478	0.475	0.476	0.498	0.528	0.522	0.508	0.509	0.532	0.522	1.918	2.024	2.071
Wind	0.430	0.350	0.289	0.382	0.420	0.383	0.310	0.410	0.435	0.395	0.320	0.422	1.450	1.522	1.572
Total Consumption	2.045	2.104	2.048	2.044	2.105	2.284	2.235	2.209	2.250	2.439	2.365	2.297	8.241	8.832	9.351

Notes: EIA completed modeling and analysis for this report on May 2, 2024.

The approximate break between historical and forecast values is shown with historical data printed in bold; estimates and forecasts in italics.

(a) Energy consumption for conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

(b) Solar energy consumption by utility-scale power plants (capacity greater than or equal to 1 megawatt) in the electric power, commercial, and industrial sectors

(c) Municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass.

(d) Losses and co-products from the production of fuel ethanol and biomass-based diesel

(e) Subtotals for the industrial and commercial sectors might not equal the sum of the components. The subtotal for the industrial sector includes ethanol consumption that is not shown separately. The subtotal for the commercial sector includes ethanol and hydroelectric consumption that are not shown separately.

(f) Solar consumption in the residential sector includes energy from small-scale solar photovoltaic systems (<1 megawatt), and it includes solar heating consumption in all sectors.

(g) Fuel ethanol and biodiesel, renewable diesel, and other biofuels consumption in the transportation sector includes production, stock change, and imports less exports.

Historical data: Latest data available from EIA databases supporting the following reports: Electric Power Monthly, Electric Power Annual,

Minor discrepancies with published historical data are due to independent rounding and possible revisions not yet reflected in the STEO.

Forecast data: EIA Short-Term Integrated Forecasting System.