

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

	2023				2024				2025				Year		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2023	2024	2025
All Sectors	2.045	2.104	2.048	2.044	2.092	2.251	2.200	2.195	2.218	2.420	2.332	2.273	8.241	8.738	9.243
Biodiesel, renewable diesel, and other (g)	0.140	0.173	0.175	0.172	0.177	0.193	0.188	0.199	0.188	0.199	0.200	0.208	0.660	0.757	0.795
Biofuel losses and co-products (d)	0.199	0.202	0.206	0.214	0.209	0.209	0.207	0.209	0.204	0.206	0.207	0.211	0.821	0.834	0.828
Ethanol (f)	0.281	0.298	0.299	0.300	0.279	0.300	0.302	0.298	0.279	0.298	0.301	0.299	1.177	1.179	1.177
Geothermal	0.030	0.029	0.030	0.030	0.029	0.029	0.030	0.031	0.029	0.028	0.030	0.031	0.120	0.119	0.118
Hydroelectric power (a)	0.209	0.220	0.201	0.189	0.218	0.219	0.196	0.195	0.226	0.257	0.220	0.203	0.818	0.827	0.906
Solar (b)(f)	0.162	0.262	0.272	0.181	0.201	0.328	0.359	0.237	0.259	0.418	0.435	0.278	0.878	1.125	1.389
Waste biomass (c)	0.102	0.098	0.097	0.101	0.101	0.098	0.098	0.102	0.100	0.098	0.099	0.102	0.398	0.399	0.399
Wood biomass	0.493	0.472	0.478	0.475	0.461	0.477	0.522	0.520	0.501	0.504	0.532	0.522	1.918	1.980	2.059
Wind	0.430	0.350	0.289	0.382	0.418	0.398	0.299	0.404	0.433	0.413	0.309	0.417	1.450	1.518	1.572
Electric power sector	0.838	0.830	0.766	0.773	0.855	0.929	0.852	0.859	0.933	1.061	0.950	0.912	3.207	3.495	3.856
Geothermal	0.014	0.014	0.014	0.014	0.013	0.013	0.014	0.015	0.013	0.012	0.014	0.015	0.056	0.055	0.054
Hydroelectric power (a)	0.208	0.219	0.200	0.188	0.217	0.218	0.195	0.194	0.225	0.256	0.219	0.202	0.814	0.823	0.902
Solar (b)	0.100	0.167	0.177	0.114	0.128	0.222	0.252	0.164	0.179	0.299	0.316	0.196	0.558	0.765	0.990
Waste biomass (c)	0.043	0.041	0.042	0.041	0.042	0.039	0.041	0.041	0.041	0.040	0.042	0.041	0.167	0.164	0.165
Wood biomass	0.044	0.040	0.045	0.033	0.038	0.040	0.051	0.040	0.043	0.040	0.050	0.039	0.162	0.169	0.172
Wind	0.430	0.350	0.289	0.382	0.418	0.398	0.299	0.404	0.433	0.413	0.309	0.417	1.450	1.518	1.572
Industrial sector (e)	0.568	0.553	0.554	0.573	0.563	0.571	0.595	0.607	0.593	0.594	0.606	0.614	2.249	2.336	2.406
Biofuel losses and co-products (d)	0.199	0.202	0.206	0.214	0.209	0.209	0.207	0.209	0.204	0.206	0.207	0.211	0.821	0.834	0.828
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	0.018	0.019
Waste biomass (c)	0.041	0.040	0.037	0.042	0.042	0.040	0.039	0.042	0.041	0.040	0.039	0.042	0.160	0.162	0.162
Wood biomass	0.318	0.300	0.299	0.307	0.302	0.310	0.337	0.346	0.338	0.335	0.347	0.350	1.224	1.294	1.369
Commercial sector (e)	0.064	0.071	0.073	0.066	0.066	0.074	0.076	0.069	0.069	0.078	0.080	0.071	0.274	0.285	0.298
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	0.024	0.017	0.019	0.027	0.027	0.019	0.069	0.079	0.093
Waste biomass (c)	0.017	0.017	0.018	0.018	0.018	0.018	0.018	0.019	0.017	0.018	0.018	0.019	0.071	0.072	0.072
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
Residential sector	0.166	0.191	0.193	0.174	0.163	0.196	0.201	0.177	0.167	0.204	0.209	0.182	0.725	0.737	0.762
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	0.039	0.040
Solar (f)	0.045	0.069	0.070	0.051	0.054	0.078	0.077	0.053	0.057	0.086	0.086	0.059	0.235	0.263	0.288
Wood biomass	0.111	0.112	0.114	0.114	0.100	0.108	0.114	0.114	0.100	0.108	0.114	0.114	0.450	0.435	0.435
Transportation sector	0.408	0.457	0.462	0.458	0.444	0.481	0.476	0.484	0.456	0.484	0.487	0.494	1.785	1.884	1.920
Biodiesel, renewable diesel, and other (g)	0.140	0.173	0.175	0.172	0.177	0.193	0.188	0.199	0.188	0.199	0.200	0.208	0.660	0.757	0.795
Ethanol (g)	0.268	0.284	0.286	0.286	0.267	0.287	0.288	0.285	0.267	0.284	0.288	0.286	1.125	1.127	1.125

(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 and energy consumption by small-scale solar photovoltaic systems (less than 1 megawatts in size).
 (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.
 Some biomass-based diesel may be consumed in the residential sector in heating oil.

Notes:
 EIA completed modeling and analysis for this report on August 1, 2024.
 The approximate break between historical and forecast values is shown with historical data with no shading; estimates and forecasts are shaded gray.
Sources:
 Monthly Energy Review, and Petroleum Supply Monthly.
 Minor discrepancies with published historical data are due to independent rounding and possible revisions not yet reflected in the STEO.
 Forecasts: EIA Short-Term Integrated Forecasting System.