

Table 8. U.S. Renewable Energy Consumption (Quadrillion Btu)

U.S. Energy Information Administration | Short-Term Energy Outlook - June 2017

	2016				2017				2018				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2016	2017	2018
Electric Power Sector															
Hydroelectric Power (a)	0.710	0.684	0.528	0.543	0.771	<i>0.892</i>	<i>0.655</i>	<i>0.550</i>	<i>0.679</i>	<i>0.725</i>	<i>0.639</i>	<i>0.538</i>	2.465	<i>2.868</i>	<i>2.581</i>
Wood Biomass (b)	0.061	0.049	0.060	0.052	0.057	<i>0.053</i>	<i>0.062</i>	<i>0.055</i>	<i>0.056</i>	<i>0.050</i>	<i>0.062</i>	<i>0.056</i>	0.222	<i>0.227</i>	<i>0.224</i>
Waste Biomass (c)	0.070	0.072	0.072	0.072	0.071	<i>0.070</i>	<i>0.073</i>	<i>0.072</i>	<i>0.069</i>	<i>0.072</i>	<i>0.074</i>	<i>0.073</i>	0.287	<i>0.286</i>	<i>0.289</i>
Wind	0.577	0.531	0.452	0.596	0.643	<i>0.625</i>	<i>0.439</i>	<i>0.617</i>	<i>0.643</i>	<i>0.665</i>	<i>0.473</i>	<i>0.681</i>	2.155	<i>2.323</i>	<i>2.461</i>
Geothermal	0.040	0.039	0.040	0.043	0.041	<i>0.040</i>	<i>0.040</i>	<i>0.040</i>	<i>0.040</i>	<i>0.039</i>	<i>0.040</i>	<i>0.041</i>	0.162	<i>0.162</i>	<i>0.160</i>
Solar	0.062	0.095	0.110	0.077	0.087	<i>0.154</i>	<i>0.148</i>	<i>0.092</i>	<i>0.101</i>	<i>0.180</i>	<i>0.176</i>	<i>0.105</i>	0.344	<i>0.482</i>	<i>0.562</i>
Subtotal	1.521	1.470	1.261	1.384	1.671	<i>1.833</i>	<i>1.418</i>	<i>1.426</i>	<i>1.588</i>	<i>1.731</i>	<i>1.465</i>	<i>1.493</i>	5.636	<i>6.348</i>	<i>6.276</i>
Industrial Sector															
Hydroelectric Power (a)	0.004	0.003	0.002	0.003	0.004	<i>0.003</i>	<i>0.002</i>	<i>0.003</i>	<i>0.004</i>	<i>0.003</i>	<i>0.002</i>	<i>0.003</i>	0.012	<i>0.012</i>	<i>0.012</i>
Wood Biomass (b)	0.321	0.315	0.320	0.326	0.316	<i>0.311</i>	<i>0.316</i>	<i>0.317</i>	<i>0.308</i>	<i>0.303</i>	<i>0.313</i>	<i>0.316</i>	1.283	<i>1.260</i>	<i>1.239</i>
Waste Biomass (c)	0.046	0.047	0.047	0.046	0.051	<i>0.049</i>	<i>0.048</i>	<i>0.049</i>	<i>0.049</i>	<i>0.050</i>	<i>0.049</i>	<i>0.049</i>	0.186	<i>0.197</i>	<i>0.196</i>
Geothermal	0.001	0.001	0.001	0.001	0.001	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	0.004	<i>0.004</i>	<i>0.004</i>
Biofuel Losses and Co-products (f)	0.196	0.193	0.203	0.205	0.202	<i>0.203</i>	<i>0.207</i>	<i>0.207</i>	<i>0.200</i>	<i>0.203</i>	<i>0.206</i>	<i>0.206</i>	0.796	<i>0.818</i>	<i>0.815</i>
Subtotal	0.573	0.564	0.578	0.585	0.577	<i>0.572</i>	<i>0.579</i>	<i>0.580</i>	<i>0.566</i>	<i>0.564</i>	<i>0.576</i>	<i>0.579</i>	2.300	<i>2.309</i>	<i>2.285</i>
Commercial Sector															
Wood Biomass (b)	0.020	0.020	0.021	0.021	0.020	<i>0.018</i>	<i>0.019</i>	<i>0.018</i>	<i>0.020</i>	<i>0.018</i>	<i>0.019</i>	<i>0.018</i>	0.082	<i>0.075</i>	<i>0.075</i>
Waste Biomass (c)	0.013	0.012	0.012	0.013	0.013	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	0.049	<i>0.049</i>	<i>0.048</i>
Geothermal	0.005	0.005	0.005	0.005	0.005	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	0.020	<i>0.020</i>	<i>0.020</i>
Subtotal	0.060	0.065	0.066	0.060	0.061	<i>0.067</i>	<i>0.069</i>	<i>0.060</i>	<i>0.064</i>	<i>0.073</i>	<i>0.074</i>	<i>0.064</i>	0.251	<i>0.257</i>	<i>0.275</i>
Residential Sector															
Wood Biomass (b)	0.093	0.093	0.094	0.094	0.095	<i>0.098</i>	<i>0.099</i>	<i>0.099</i>	<i>0.103</i>	<i>0.103</i>	<i>0.104</i>	<i>0.104</i>	0.373	<i>0.392</i>	<i>0.413</i>
Geothermal	0.010	0.010	0.010	0.010	0.010	<i>0.012</i>	<i>0.012</i>	<i>0.012</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	<i>0.013</i>	0.040	<i>0.046</i>	<i>0.052</i>
Solar (d)	0.030	0.047	0.049	0.034	0.037	<i>0.059</i>	<i>0.063</i>	<i>0.045</i>	<i>0.049</i>	<i>0.076</i>	<i>0.079</i>	<i>0.057</i>	0.161	<i>0.204</i>	<i>0.261</i>
Subtotal	0.133	0.150	0.153	0.138	0.142	<i>0.169</i>	<i>0.174</i>	<i>0.156</i>	<i>0.164</i>	<i>0.191</i>	<i>0.196</i>	<i>0.174</i>	0.573	<i>0.642</i>	<i>0.726</i>
Transportation Sector															
Ethanol (e)	0.277	0.283	0.293	0.288	0.268	<i>0.291</i>	<i>0.298</i>	<i>0.290</i>	<i>0.271</i>	<i>0.290</i>	<i>0.296</i>	<i>0.289</i>	1.141	<i>1.148</i>	<i>1.146</i>
Biomass-based Diesel (e)	0.051	0.066	0.088	0.084	0.051	<i>0.072</i>	<i>0.086</i>	<i>0.090</i>	<i>0.069</i>	<i>0.076</i>	<i>0.088</i>	<i>0.089</i>	0.289	<i>0.299</i>	<i>0.323</i>
Subtotal	0.328	0.349	0.381	0.372	0.319	<i>0.364</i>	<i>0.384</i>	<i>0.380</i>	<i>0.339</i>	<i>0.366</i>	<i>0.384</i>	<i>0.379</i>	1.430	<i>1.447</i>	<i>1.469</i>
All Sectors Total															
Hydroelectric Power (a)	0.714	0.687	0.530	0.546	0.775	<i>0.896</i>	<i>0.657</i>	<i>0.553</i>	<i>0.683</i>	<i>0.729</i>	<i>0.642</i>	<i>0.540</i>	2.477	<i>2.881</i>	<i>2.594</i>
Wood Biomass (b)	0.496	0.477	0.495	0.492	0.487	<i>0.480</i>	<i>0.496</i>	<i>0.489</i>	<i>0.486</i>	<i>0.474</i>	<i>0.499</i>	<i>0.493</i>	1.959	<i>1.952</i>	<i>1.952</i>
Waste Biomass (c)	0.129	0.131	0.130	0.131	0.134	<i>0.131</i>	<i>0.134</i>	<i>0.132</i>	<i>0.130</i>	<i>0.134</i>	<i>0.135</i>	<i>0.134</i>	0.522	<i>0.532</i>	<i>0.533</i>
Wind	0.577	0.531	0.452	0.596	0.643	<i>0.625</i>	<i>0.439</i>	<i>0.617</i>	<i>0.643</i>	<i>0.665</i>	<i>0.473</i>	<i>0.681</i>	2.155	<i>2.323</i>	<i>2.461</i>
Geothermal	0.056	0.055	0.056	0.059	0.057	<i>0.058</i>	<i>0.058</i>	<i>0.058</i>	<i>0.059</i>	<i>0.058</i>	<i>0.059</i>	<i>0.060</i>	0.226	<i>0.230</i>	<i>0.236</i>
Solar	0.110	0.166	0.183	0.128	0.139	<i>0.246</i>	<i>0.244</i>	<i>0.161</i>	<i>0.177</i>	<i>0.294</i>	<i>0.295</i>	<i>0.191</i>	0.587	<i>0.790</i>	<i>0.957</i>
Ethanol (e)	0.287	0.295	0.305	0.299	0.278	<i>0.301</i>	<i>0.310</i>	<i>0.301</i>	<i>0.281</i>	<i>0.302</i>	<i>0.308</i>	<i>0.300</i>	1.186	<i>1.190</i>	<i>1.191</i>
Biomass-based Diesel (e)	0.051	0.066	0.088	0.084	0.051	<i>0.072</i>	<i>0.086</i>	<i>0.090</i>	<i>0.069</i>	<i>0.076</i>	<i>0.088</i>	<i>0.089</i>	0.289	<i>0.299</i>	<i>0.323</i>
Biofuel Losses and Co-products (f)	0.196	0.193	0.203	0.205	0.202	<i>0.203</i>	<i>0.207</i>	<i>0.207</i>	<i>0.200</i>	<i>0.203</i>	<i>0.206</i>	<i>0.206</i>	0.796	<i>0.818</i>	<i>0.815</i>
Total Consumption	2.614	2.598	2.439	2.538	2.741	<i>3.005</i>	<i>2.624</i>	<i>2.603</i>	<i>2.721</i>	<i>2.926</i>	<i>2.696</i>	<i>2.688</i>	10.190	<i>10.973</i>	<i>11.031</i>

- = no data available

(a) Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

(b) Wood and wood-derived fuels.

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

(d) Includes small-scale solar thermal and photovoltaic energy used in the commercial, industrial, and electric power sectors.

(e) Fuel ethanol and biomass-based diesel 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.

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

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

Historical data: Latest data available from EIA databases supporting the following reports: *Electric Power Monthly*, DOE/EIA-0226 and *Renewable Energy Annual*, DOE/EIA-0603; *Petroleum Supply Monthly*, DOE/EIA-0109.

Minor discrepancies with published historical data are due to independent rounding.

Projections: EIA Regional Short-Term Energy Model.