

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

U.S. Energy Information Administration | Short-Term Energy Outlook - September 2012

	2011				2012				2013				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2011	2012	2013
<b>Electric Power Sector</b>															
Hydroelectric Power (a) .....	<b>0.801</b>	<b>0.941</b>	<b>0.771</b>	<b>0.641</b>	<b>0.688</b>	<b>0.803</b>	<i>0.654</i>	<i>0.565</i>	<i>0.664</i>	<i>0.783</i>	<i>0.625</i>	<i>0.576</i>	<b>3.154</b>	2.710	2.650
Wood Biomass (b) .....	<b>0.046</b>	<b>0.040</b>	<b>0.047</b>	<b>0.042</b>	<b>0.045</b>	<b>0.038</b>	<i>0.050</i>	<i>0.049</i>	<i>0.051</i>	<i>0.046</i>	<i>0.057</i>	<i>0.052</i>	<b>0.175</b>	0.182	0.205
Waste Biomass (c) .....	<b>0.064</b>	<b>0.067</b>	<b>0.069</b>	<b>0.069</b>	<b>0.066</b>	<b>0.068</b>	<i>0.067</i>	<i>0.067</i>	<i>0.067</i>	<i>0.070</i>	<i>0.072</i>	<i>0.070</i>	<b>0.269</b>	0.268	0.278
Wind .....	<b>0.290</b>	<b>0.341</b>	<b>0.211</b>	<b>0.326</b>	<b>0.375</b>	<b>0.358</b>	<i>0.279</i>	<i>0.361</i>	<i>0.387</i>	<i>0.423</i>	<i>0.313</i>	<i>0.378</i>	<b>1.168</b>	1.373	1.501
Geothermal .....	<b>0.042</b>	<b>0.040</b>	<b>0.040</b>	<b>0.041</b>	<b>0.041</b>	<b>0.041</b>	<i>0.042</i>	<i>0.042</i>	<i>0.041</i>	<i>0.040</i>	<i>0.042</i>	<i>0.042</i>	<b>0.163</b>	0.166	0.165
Solar .....	<b>0.002</b>	<b>0.006</b>	<b>0.006</b>	<b>0.003</b>	<b>0.004</b>	<b>0.012</b>	<i>0.013</i>	<i>0.006</i>	<i>0.008</i>	<i>0.021</i>	<i>0.021</i>	<i>0.009</i>	<b>0.018</b>	0.035	0.059
Subtotal .....	<b>1.245</b>	<b>1.435</b>	<b>1.145</b>	<b>1.122</b>	<b>1.219</b>	<b>1.315</b>	<i>1.104</i>	<i>1.089</i>	<i>1.218</i>	<i>1.384</i>	<i>1.131</i>	<i>1.127</i>	<b>4.947</b>	4.727	4.859
<b>Industrial Sector</b>															
Hydroelectric Power (a) .....	<b>0.005</b>	<b>0.005</b>	<b>0.003</b>	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<b>0.018</b>	0.020	0.020
Wood Biomass (b) .....	<b>0.325</b>	<b>0.322</b>	<b>0.331</b>	<b>0.334</b>	<b>0.325</b>	<b>0.314</b>	<i>0.321</i>	<i>0.320</i>	<i>0.307</i>	<i>0.302</i>	<i>0.317</i>	<i>0.323</i>	<b>1.311</b>	1.280	1.250
Waste Biomass (c) .....	<b>0.043</b>	<b>0.042</b>	<b>0.043</b>	<b>0.044</b>	<b>0.043</b>	<b>0.043</b>	<i>0.047</i>	<i>0.045</i>	<i>0.044</i>	<i>0.043</i>	<i>0.046</i>	<i>0.043</i>	<b>0.172</b>	0.178	0.176
Geothermal .....	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<b>0.001</b>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<b>0.004</b>	0.004	0.004
Subtotal .....	<b>0.378</b>	<b>0.375</b>	<b>0.383</b>	<b>0.388</b>	<b>0.378</b>	<b>0.369</b>	<i>0.379</i>	<i>0.376</i>	<i>0.361</i>	<i>0.356</i>	<i>0.375</i>	<i>0.377</i>	<b>1.524</b>	1.501	1.468
<b>Commercial Sector</b>															
Wood Biomass (b) .....	<b>0.017</b>	<b>0.018</b>	<b>0.018</b>	<b>0.018</b>	<b>0.018</b>	<b>0.018</b>	<i>0.019</i>	<i>0.018</i>	<i>0.018</i>	<i>0.017</i>	<i>0.019</i>	<i>0.017</i>	<b>0.071</b>	0.072	0.071
Waste Biomass (c) .....	<b>0.009</b>	<b>0.008</b>	<b>0.009</b>	<b>0.010</b>	<b>0.009</b>	<b>0.009</b>	<i>0.011</i>	<i>0.010</i>	<i>0.010</i>	<i>0.010</i>	<i>0.011</i>	<i>0.010</i>	<b>0.036</b>	0.038	0.042
Geothermal .....	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<b>0.005</b>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<i>0.005</i>	<b>0.020</b>	0.020	0.020
Subtotal .....	<b>0.031</b>	<b>0.032</b>	<b>0.034</b>	<b>0.036</b>	<b>0.032</b>	<b>0.033</b>	<i>0.037</i>	<i>0.035</i>	<i>0.035</i>	<i>0.034</i>	<i>0.036</i>	<i>0.035</i>	<b>0.133</b>	0.136	0.140
<b>Residential Sector</b>															
Wood Biomass (b) .....	<b>0.106</b>	<b>0.107</b>	<b>0.108</b>	<b>0.108</b>	<b>0.107</b>	<b>0.106</b>	<i>0.107</i>	<i>0.107</i>	<i>0.103</i>	<i>0.104</i>	<i>0.105</i>	<i>0.105</i>	<b>0.430</b>	0.427	0.417
Geothermal .....	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<i>0.010</i>	<i>0.010</i>	<i>0.010</i>	<i>0.010</i>	<i>0.010</i>	<i>0.010</i>	<b>0.040</b>	0.040	0.040
Solar (d) .....	<b>0.035</b>	<b>0.035</b>	<b>0.035</b>	<b>0.035</b>	<b>0.042</b>	<b>0.042</b>	<i>0.043</i>	<i>0.043</i>	<i>0.050</i>	<i>0.051</i>	<i>0.052</i>	<i>0.052</i>	<b>0.140</b>	0.170	0.205
Subtotal .....	<b>0.150</b>	<b>0.152</b>	<b>0.154</b>	<b>0.154</b>	<b>0.159</b>	<b>0.159</b>	<i>0.159</i>	<i>0.159</i>	<i>0.163</i>	<i>0.165</i>	<i>0.167</i>	<i>0.167</i>	<b>0.610</b>	0.636	0.661
<b>Transportation Sector</b>															
Ethanol (e) .....	<b>0.258</b>	<b>0.272</b>	<b>0.270</b>	<b>0.270</b>	<b>0.257</b>	<b>0.276</b>	<i>0.270</i>	<i>0.272</i>	<i>0.264</i>	<i>0.274</i>	<i>0.277</i>	<i>0.276</i>	<b>1.070</b>	1.075	1.092
Biodiesel (e) .....	<b>0.012</b>	<b>0.026</b>	<b>0.034</b>	<b>0.039</b>	<b>0.019</b>	<b>0.037</b>	<i>0.035</i>	<i>0.036</i>	<i>0.035</i>	<i>0.037</i>	<i>0.037</i>	<i>0.037</i>	<b>0.112</b>	0.127	0.146
Subtotal .....	<b>0.269</b>	<b>0.298</b>	<b>0.305</b>	<b>0.309</b>	<b>0.276</b>	<b>0.313</b>	<i>0.305</i>	<i>0.308</i>	<i>0.300</i>	<i>0.311</i>	<i>0.315</i>	<i>0.313</i>	<b>1.181</b>	1.202	1.239
<b>All Sectors Total</b>															
Hydroelectric Power (a) .....	<b>0.806</b>	<b>0.946</b>	<b>0.775</b>	<b>0.645</b>	<b>0.693</b>	<b>0.808</b>	<i>0.659</i>	<i>0.570</i>	<i>0.669</i>	<i>0.788</i>	<i>0.631</i>	<i>0.581</i>	<b>3.171</b>	2.730	2.670
Wood Biomass (b) .....	<b>0.495</b>	<b>0.486</b>	<b>0.504</b>	<b>0.502</b>	<b>0.494</b>	<b>0.478</b>	<i>0.497</i>	<i>0.494</i>	<i>0.478</i>	<i>0.470</i>	<i>0.498</i>	<i>0.497</i>	<b>1.987</b>	1.963	1.943
Waste Biomass (c) .....	<b>0.116</b>	<b>0.118</b>	<b>0.121</b>	<b>0.123</b>	<b>0.117</b>	<b>0.120</b>	<i>0.125</i>	<i>0.122</i>	<i>0.121</i>	<i>0.123</i>	<i>0.129</i>	<i>0.123</i>	<b>0.477</b>	0.484	0.497
Wind .....	<b>0.290</b>	<b>0.341</b>	<b>0.211</b>	<b>0.326</b>	<b>0.375</b>	<b>0.358</b>	<i>0.279</i>	<i>0.361</i>	<i>0.387</i>	<i>0.423</i>	<i>0.313</i>	<i>0.378</i>	<b>1.168</b>	1.373	1.501
Geothermal .....	<b>0.057</b>	<b>0.056</b>	<b>0.056</b>	<b>0.057</b>	<b>0.057</b>	<b>0.057</b>	<i>0.058</i>	<i>0.058</i>	<i>0.057</i>	<i>0.056</i>	<i>0.058</i>	<i>0.058</i>	<b>0.226</b>	0.229	0.229
Solar .....	<b>0.037</b>	<b>0.041</b>	<b>0.042</b>	<b>0.039</b>	<b>0.046</b>	<b>0.054</b>	<i>0.056</i>	<i>0.049</i>	<i>0.058</i>	<i>0.072</i>	<i>0.073</i>	<i>0.060</i>	<b>0.158</b>	0.205	0.264
Ethanol (e) .....	<b>0.262</b>	<b>0.277</b>	<b>0.277</b>	<b>0.278</b>	<b>0.262</b>	<b>0.281</b>	<i>0.278</i>	<i>0.279</i>	<i>0.271</i>	<i>0.281</i>	<i>0.284</i>	<i>0.283</i>	<b>1.093</b>	1.100	1.118
Biodiesel (e) .....	<b>0.012</b>	<b>0.026</b>	<b>0.034</b>	<b>0.039</b>	<b>0.019</b>	<b>0.037</b>	<i>0.035</i>	<i>0.036</i>	<i>0.035</i>	<i>0.037</i>	<i>0.037</i>	<i>0.037</i>	<b>0.112</b>	0.127	0.146
<b>Total Consumption</b> .....	<b>2.074</b>	<b>2.292</b>	<b>2.020</b>	<b>2.008</b>	<b>2.063</b>	<b>2.188</b>	<i>1.984</i>	<i>1.967</i>	<i>2.077</i>	<i>2.249</i>	<i>2.023</i>	<i>2.018</i>	<b>8.393</b>	8.203	8.367

- = 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 biodiesel consumption in the transportation sector includes production, stock change, and imports less exports. Some biodiesel may be consumed in the residential sector in heating oil.

**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:** Generated by simulation of the U.S. Energy Information Administration *Short-Term Energy Outlook* model.