Table 8a. U.S. Renewable Energy Consumption (Quadrillion Btu)
U.S. Energy Information Administration | Short-Term Energy Outlook - August 2021

<table>
<thead>
<tr>
<th></th>
<th>Electric Power Sector</th>
<th>Residential Sector</th>
<th>Transportation Sector</th>
<th>All Sectors Total</th>
<th>Total Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
<td>2021</td>
<td>2022</td>
<td>2020</td>
<td>2021</td>
</tr>
<tr>
<td></td>
<td>Q1  Q2  Q3  Q4</td>
<td>Q1  Q2  Q3  Q4</td>
<td>Q1  Q2  Q3  Q4</td>
<td>Q1  Q2  Q3  Q4</td>
<td>Q1  Q2  Q3  Q4</td>
</tr>
<tr>
<td>Geothermal</td>
<td>0.035  0.037  0.037  0.038</td>
<td>0.041  0.041  0.038  0.035</td>
<td>0.035  0.034  0.039  0.036</td>
<td>0.147  0.154  0.144</td>
<td></td>
</tr>
<tr>
<td>Hydroelectric Power (a)</td>
<td>0.668  0.724  0.629  0.561</td>
<td>0.617  0.619  0.599  0.559</td>
<td>0.691  0.694  0.597  0.556</td>
<td>2.581  2.394  2.538</td>
<td></td>
</tr>
<tr>
<td>Solar (b)</td>
<td>0.152  0.248  0.252  0.168</td>
<td>0.195  0.337  0.335  0.218</td>
<td>0.259  0.426  0.416  0.266</td>
<td>0.820  1.085  1.367</td>
<td></td>
</tr>
<tr>
<td>Waste Biomass (c)</td>
<td>0.063  0.058  0.059  0.059</td>
<td>0.059  0.065  0.072  0.063</td>
<td>0.055  0.061  0.065  0.058</td>
<td>0.238  0.258  0.238</td>
<td></td>
</tr>
<tr>
<td>Wood Biomass</td>
<td>0.049  0.043  0.048  0.046</td>
<td>0.050  0.056  0.097  0.065</td>
<td>0.054  0.056  0.068  0.050</td>
<td>0.185  0.267  0.228</td>
<td></td>
</tr>
<tr>
<td>Wind</td>
<td>0.796  0.793  0.615  0.862</td>
<td>0.677  0.929  0.734  1.010</td>
<td>1.013  1.036  0.800  1.078</td>
<td>3.065  3.551  3.926</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal | 1.761  1.904  1.639  1.733 | 1.833  2.046  1.877  1.953 | 2.107  2.307  1.984  2.043 | 7.037  7.709  8.441 |

Industrial Sector

- Biofuel Losses and Co-products (d)
- Geothermal
- Solar (b)
- Waste Biomass (c)
- Wood Biomass
- Subtotal

Commercial Sector

- Solar (b)
- Waste Biomass (c)
- Wood Biomass
- Subtotal

Residential Sector

- Solar (e)
- Wood Biomass
- Subtotal

Transportation Sector

- Biomass-based Diesel (f)
- Ethanol (f)
- Subtotal

All Sectors Total

- Biomass-based Diesel (f)
- Biofuel Losses and Co-products (d)
- Ethanol (f)
- Geothermal
- Hydroelectric Power (a)
- Solar (b)(e)
- Waste Biomass (c)
- Wood Biomass
- Wind

Total Consumption

Notes: EIA completed modeling and analysis for this report on August 5, 2021.

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

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

Forecasts: EIA Short-Term Integrated Forecasting System.

Notes:
(a) Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.
(b) Solar consumption in the electric power, commercial, and industrial sectors includes energy produced from large scale (>1 MW) solar thermal and photovoltaic generators and small-scale (<1 MW)
(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) Solar consumption in the residential sector includes energy from small-scale (<1 MW) solar photovoltaic systems. Also includes solar heating consumption in all sectors.
(f) 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 - no data available