In the U.S, most of our energy comes from nonrenewable energy sources such as coal, petroleum, natural gas, and uranium (nuclear). These are used to make electricity, to heat our homes, to move our cars, and to manufacture products.

### U.S. energy consumption by source, 2014

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomass</td>
<td>4.9%</td>
</tr>
<tr>
<td>Hydropower</td>
<td>2.5%</td>
</tr>
<tr>
<td>Geothermal</td>
<td>0.2%</td>
</tr>
<tr>
<td>Wind</td>
<td>1.8%</td>
</tr>
<tr>
<td>Solar &amp; other</td>
<td>0.4%</td>
</tr>
<tr>
<td>Petroleum</td>
<td>35.4%</td>
</tr>
<tr>
<td>Natural gas</td>
<td>28%</td>
</tr>
<tr>
<td>Coal</td>
<td>18.2%</td>
</tr>
<tr>
<td>Uranium</td>
<td>8.5%</td>
</tr>
</tbody>
</table>

Sum of individual percentages may not equal 100 because of independent rounding.

Electricity is only about 40% of our total energy consumption
How is Electricity Delivered to Your Home?

Electric power generation, transmission, and distribution diagram

Power plant generates electricity
Transmission lines carry electricity long distance
Distribution lines carry electricity to houses
Transformer steps up voltage for transmission
Neighborhood transformer steps down voltage
Transformers on poles step down electricity before it enters houses

Source: National Energy Education Development Project (public domain)
Note: rejected energy is energy lost as heat.
Environmental Impacts of Fossil Fuels

Costs to Society, Consumers, and Businesses
- Costs of oil imports
- Costs of energy insecurity
- Costs of traffic congestion
- Costs of extreme heat and storm damage
- Costs of public health response
- Costs of coastal infrastructure/sea level rise
- Costs of more wildfires
- Loss of U.S. competitiveness and clean energy jobs
- and more...
WATER USE BY POWER PLANTS*

- Wind: 0 gallons
- Solar Thermal with Dry Cooling: 26 gallons
- Solar Photovoltaic: 26 gallons
- Natural Gas: 198 gallons
- Nuclear: 672 gallons
- Coal: 687 gallons
- Solar Thermal with Wet Cooling: 786 gallons

Water consumed to produce one megawatt-hour of electricity, which is enough to power 1,000 homes for an hour.

What can YOU do on Campus?

• Turn Things Off When You're Done!
  • Even on standby mode, electronics can use a significant amount of power

• Unplug seldom-used appliances

• Enable Sleep or Hibernate mode on your computer
  • Turn off screen savers, they actually use more energy!

• Make sure new (and old) game consoles have their auto power-down feature enabled.

• Use Power strips to easily turn off many devices at once
  • There are also timed and smart power strips that will turn off electronics/appliances after a certain time, when you leave the room, or when they go into standby mode

• Buy energy star electronics!
Small appliances such as printers, TVs, scanners, coffee makers, microwaves and similar items draw energy when plugged in, even if they are not being used!
If you currently have a game console, chances are it is in connected standby mode. If you have no need to be continuously connected to the internet, turn it off!

**Game consoles consume 10 to 20 times more energy to stream a movie than an Internet-ready TV or a small media player**

http://www.nrdc.org/air/energy/genergy.asp