

# Energy Resources

Sources of energy, or energy resources, are used for generating electricity and for transport, heating and cooking. Each energy resource has different benefits and drawbacks.

## Non-Renewable Resources

These resources are finite and will eventually run out. Once they are depleted, they cannot be replenished.



## Renewable Resources

These resources are infinite. They can be easily replenished and will not run out.



## If a country needs more electricity, which resource should it use?

Nuclear	Fossil Fuel	Wind	Hydroelectric	Solar	Biomass
<ul style="list-style-type: none"> <li>✓ Efficient, generates a lot of electricity</li> <li>✗ Highly radioactive waste products, risk of accidents</li> </ul>	<ul style="list-style-type: none"> <li>✓ Cheap fuel that is easy to obtain</li> <li>✗ Produces the polluting gases carbon dioxide and sulfur dioxide</li> </ul>	<ul style="list-style-type: none"> <li>✓ A non-polluting, renewable resource</li> <li>✗ Wind turbines require a lot of space and only work when there is wind</li> </ul>	<ul style="list-style-type: none"> <li>✓ Potential to generate a lot of electricity</li> <li>✗ Dams are expensive to build and can negatively affect wildlife</li> </ul>	<ul style="list-style-type: none"> <li>✓ Photovoltaic (PV) panels can be installed on individual buildings</li> <li>✗ PV panels are expensive and only work when it is sunny</li> </ul>	<ul style="list-style-type: none"> <li>✓ Releases only the CO<sub>2</sub> within biomass (plants) when it is burnt, so it is carbon neutral</li> <li>✗ Requires land to grow plants, which reduces space for growing food</li> </ul>

In reality, a country will use a range of different energy resources for its needs.