

Nonrenewable Energy Resource	Description	Environmental Impacts
<b>Coal</b>	Black or brown solid combustible substance.	
<b>oil</b>	A viscous liquid derived from petroleum, esp. for use as a fuel or lubricant.	
<b>Natural gas</b>	Flammable gas, consisting largely of methane and other hydrocarbons, occurring naturally underground and used as fuel.	
<b>Nuclear</b>	Changes can occur in the structure of the nuclei of atoms. These changes are called nuclear reactions. Energy created in a nuclear reaction is called nuclear energy, or atomic energy.	

1. What are some advantages of using fossil fuels?
  - a. Their capacity to generate large amounts of electricity in a single location
  - b. They are very easy to find
  - c. Power plants that utilize gas are very efficient
  
2. Why do experts describe the rate of fossil fuel use as “unsustainable”?
  - a. Because we are so dependent on fossil fuels when we run out our country will suffer from it.
  
3. What is renewable energy?
  - a. Energy that comes from natural resources such as sunlight wind rain tides and geothermal heat.

<i>Renewable Energy Resource</i>	<i>Description</i>
Tidal Power	Power can be created through tidal generators on the ocean floor.
Wave Power	Scientists have found a way to capture energy by pumping water, and water desalination into reservoirs.
Solar Power	Photovoltaic (PV) solar power is harnessing the sun's energy to produce energy.
Wind Power	Wind power is the conversion of wind energy by wind turbines into a useful form.
Hydroelectricity	Hydroelectricity is electricity generated by hydropower, i.e., the production of power through use of the gravitational force of falling or flowing water.
Geothermal Power	Geothermal is a very powerful and an efficient way to extract a renewable energy from the earth through natural process.
Biomass	Biomass as a renewable energy source refers to living and recently dead biological material that can be used as a fuel or industrial production.
Nuclear Power	Nuclear power is any technology designed to extract usable energy from atomic nuclei via controlled nuclear reactions.

Why do you think renewable energy is gaining attention in the US? Because if we don't start using renewable energy resources, our country will suffer from it.

What do you think are barriers that are preventing the U.S. from utilizing more renewable energy sources? The fact that we haven't run out of our energy resources yet.

<i>International energy Indicators</i>				
<i>Country</i>	<i>Population (million)</i>	<i>GPD<sup>1</sup> (billion 2000 U.S \$)</i>	<i>Energy Production (Mtoe)<sup>2</sup></i>	<i>Electricity Consumption (TWh)<sup>3</sup></i>
<i>U.S.</i>	307.48	11357.07	1686.40	3961.56
<i>China</i>	1331.46	2937.55	2084.94	3503.40
<i>OECD European Country</i>	4.26	5.26	1.26	6.99
<i>Zimbabwe</i>	12.52	4.56	8.53	12.80

- Based on the data you've recorded in the chart above , provide why you think the U.S. and china produce and consume much larger amounts of electricity?
  - Because of their population.
- In 2006 how much energy did the U.S. consume?
  - 17%
- In 2006 what percentage of energy in the U.S came from fossil fuels?
  - 23%
- In 2006 what percentage of energy in the U.S. came from renewable sources? Give answer in Btu and as a percentage.
  - 7%
- List the renewable energy resources that were consumed in 2006 and the percentage of total renewable energy consumed:

*Source: Solar*

*Percentage: 1%*

*Source: Hydroelectric*

*Percentage: 42%*

*Source: Geothermal*

*Percentage: 5%*

*Source: Biomass*

*Percentage: 48%*

*Source: Wind*

*Percentage: 4%*

*State:* Missouri

*Quick Fact 1:* Missouri was the first state west of the Mississippi river to produce coal commercially.

*Quick Fact 2:* Coal supplied 82% of Missouri's net electricity generation in 2011.

<i>Fuel Mix</i>						
	<i>Coal</i>	<i>Gas</i>	<i>Oil</i>	<i>Nuclear</i>	<i>Hydro</i>	<i>Non- hydro Renewables</i>
<i>Your Regions Fuel Mix (%)</i>	79.8	1.0	0.1	17.1	1.8	0.2
<i>National Fuel Mix (%)</i>	44.5	23.3	1.1	20.2	6.8	3.6

*State:* Missouri

*Utility Name:* AmerenUE / 3Degrees

*Program Name:* pure power

*Type:*

1. *What agencies or organizations sponsored the Web sites you collected information from and what might their bias be?* **idk**
2. *Do you think the information presented on the Web sites is balanced?* **no**
3. *What makes some energy sources renewable and others nonrenewable?* **Depending if they can be reused**
4. *What are the advantages of using renewable energy sources?* **that they are better for the environment**
5. *Do you think the U.S. has an obligation to reduce its use of nonrenewable energy sources? Why?* **No because its everybodys planet not just the U.S's**
6. *What future energy trends do you think are likely for the U.S.?* **to recycle more**