


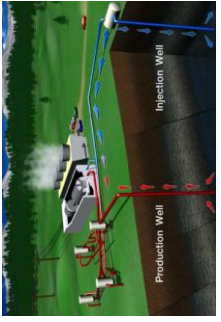






Renewable Energy Types	Disadvantages	Advantages
<p>Wind</p> 	<ul style="list-style-type: none"> • Wind resource is intermittent – can't be turned on when we need it • Much suitable area is near coast where land is expensive, or on ridges where birds/bats migrate • Can be eye-sores • Can kill birds/bats • Noisy 	<ul style="list-style-type: none"> • Free energy • Wind farms need no fuel • Produces no waste or greenhouse gases • Land can still be used for farming and ranching • Tourist attractions • Supply energy to remote areas
<p>Solar</p> 	<ul style="list-style-type: none"> • Doesn't work at night • Up-front cost expensive • Can be unreliable unless in sunny climate 	<ul style="list-style-type: none"> • Free energy • Needs no fuel • Produces no waste • Off-grid energy production
<p>Hydroelectric</p> 	<ul style="list-style-type: none"> • Dams expensive to build • Drastic environmental consequences to flooded ecosystem upstream and river downstream • Can cause displacement of residents 	<ul style="list-style-type: none"> • Free energy • No pollution or waste produced • Very reliable • Can be turned on and off to meet demand • Constant electricity generation
<p>Geothermal</p> 	<ul style="list-style-type: none"> • Need hot rocks and certain depth to build station, therefore sites are rare • Site may "run out of steam" • Hazardous gases and minerals can come up from underground- difficult to dispose of 	<ul style="list-style-type: none"> • Free energy • Produces no pollution or greenhouse gases • Power stations are small and low-impact • No fuel is needed

Non Renewable Energy Types	Disadvantages	Advantages
<p>Coal</p> 	<ul style="list-style-type: none"> Burning coal produces pollution such as SO₂ which creates acid rain Produces most greenhouse gases out of all generation types Uses a lot of water Limited supply- will only last for next 100 years Health hazards: miners can get black lung disease and emphysema from breathing in coal dust 	<ul style="list-style-type: none"> Cheap fuel and electricity costs Easily transportable Easy to find and easy to harvest Reliable source of electricity generation
<p>Natural Gas</p> 	<ul style="list-style-type: none"> Limited supply Historically variable fuel costs Combustible- gas leaks can explode and cause injury Generates greenhouse gases and other pollutants Colorless, odorless gas not easily detected, leaks in the home can cause suffocation 	<ul style="list-style-type: none"> Cheap to build plants Produces fewer emissions than other non-renewable sources Does not leave product, like ash, behind Convenient, easily transportable Reliable source of electricity generation
<p>Petroleum</p> 	<ul style="list-style-type: none"> Generates greenhouse gases Produces SO₂ which creates acid rain Many countries where oil can be found are politically unstable, making supply unreliable Oil spills cause massive environmental harm 	<ul style="list-style-type: none"> Relatively cheap Easily transportable Found in many places of the world Cleaner and easier to burn than coal Reliable source of energy
<p>Nuclear</p> 	<ul style="list-style-type: none"> Produces dangerous, toxic waste with no safe method of disposal Could cause major disaster High safety costs Health hazards in mining, processing, and disposal of uranium Unknown but likely very high costs of building new nuclear plants Uses a lot of water 	<ul style="list-style-type: none"> Plants already built generate very cheap electricity Doesn't produce smoke or CO₂, no contribution to greenhouse effect Huge amount of energy from small amounts of fuel Reliable source of electricity generation