

























Energy Pro & Con

COAL

Energy produced from coal is inexpensive.	 _____ _____ 
The amount of coal available to be mined in Wyoming could provide energy for the next 150 years.	 _____ _____ 
Coal is a nonrenewable resource.	 _____ _____ 
Wyoming is the nation's top coal producer. ₁	 _____ _____ 
Coal contributes over \$1 billion in taxes to the state. ₁ Royalties for coal supports the building of new schools. ₄	 _____ _____ 
Wyoming coal is low-sulfur and more environmentally friendly than other forms of coal. ₄	 _____ _____ 
Coal contributes 31% of CO ₂ , more that any other source. _{EPA}	 _____ _____ 
Coal is a dispatchable energy source that can be turned on and off to meet demand. ₁₈	 _____ _____ 
Coal can be accessed through underground mining or surface mining. ₃	 _____ _____ 
After coal is mined, they put back the dirt and rock, and plant trees and grass. This is called reclamation. ₃	 _____ _____ 
In 2015, 6,646 people were employed by Wyoming coal mines. ₄	 _____ _____ 
A pound of coal supplied enough electricity to light ten, 100-watt light bulbs for one hour. ₄	 _____ _____ 

Overall view of this energy resource:



















Negative _____ | _____ Positive



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Energy Pro & Con

OIL

In 2015, Wyoming's petroleum industry directly employed over 20,400 people. ₂	 _____ _____ 
In 2015, oil and gas production contributed \$2.1 billion to state and local governments. ₂	 _____ _____ 
In 2015, 751 wells were drilled and completed. Of that number, 38% found oil, 53% found gas, and 9% were dry holes. ₂	 _____ _____ 
Nationally, Wyoming ranked 8 th in production of crude oil in 2015. ₂	 _____ _____ 
Petroleum pipelines are located in all of the state's 23 counties. ₂	 _____ _____ 
It costs about \$4.5 million to \$5.5 million to drill a well. <small>(Wyoming Tribune Eagle)</small>	 _____ _____ 
Oil is a nonrenewable resource.	 _____ _____ 
Drilling can lead to spills.	 _____ _____ 
Oil companies create environmental plans.	 _____ _____ 















Overall view of this energy resource:

Negative _____ | _____ Positive



Energy Pro & Con

NATURAL GAS

Wyoming ranked 5 th in the nation in the production of natural gas in 2015. ₂	 _____ _____ 
In 2015, Wyoming had 41 operating gas plants processing nearly 87% of the state's gas production. ₂	 _____ _____ 
The extraction of natural gas releases methane into the air.	 _____ _____ 
When used to generate electricity, natural gas emits less than half of the carbon dioxide that coal does. ₈	 _____ _____ 
Natural gas is a mixture of gases you can't see, smell, or taste. ₃	 _____ _____ 
Natural gas is a nonrenewable resource.	 _____ _____ 
Natural gas has many different uses. The most common are heating, manufacturing, and electricity. ₃	 _____ _____ 

Overall view of this energy resource:





















Negative _____ | _____ Positive



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Energy Pro & Con

WIND

Wyoming is ranked 15 th in the country for the number of wind turbines it has installed. ¹³	 _____ _____ 
Generating wind power creates no emissions and uses virtually no water. ¹⁴	 _____ _____ 
Wind is a renewable energy source that can be used to make electricity. ³	 _____ _____ 
One wind turbine doesn't make much electricity. Most wind farms have many wind turbines and can take up a lot of land. ³	 _____ _____ 
The land that wind farms are on can still be used to farm or graze animals. ³	 _____ _____ 
Wind power is accessible for homeowners and businesses to set up their own power grids and even sell electricity to the power company. ⁶	 _____ _____ 
Wind provides intermittent power because the amount of electricity produced varies due to factors that cannot be controlled. ¹⁸	 _____ _____ 
The wind turbines don't run all the time. Sometimes the wind doesn't blow at all, and sometimes the wind blows too hard. Most wind turbines run between 65-90% of the time. ³	 _____ _____ 
Wind electricity makes up about 5.6% of the nation's electricity. ¹⁰	 _____ _____ 
Some types of wind turbines and wind projects cause bird and bat deaths. ⁶	 _____ _____ 
Electricity from wind energy must be stored (i.e. in batteries). ⁶	 _____ _____ 

Overall view of this energy resource:



















Negative _____ | _____ Positive



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Energy Pro & Con

HYDROPOWER

Hydropower is a clean source of energy. ₃	 _____ _____ 
When dams are built, they flood a lot of land. ₃	 _____ _____ 
Sometimes, when the flow of rivers change, fish can't swim upriver to lay their eggs, so dams have fish ladders and other devices to help fish move up the river. ₃	 _____ _____ 
Yellowstone National Park generates $\frac{1}{3}$ of its electricity from a hydroelectric plant. ₉	 _____ _____ 
Hydropower is the world's largest contributor of all renewable resources, making up 6.7% of electricity production worldwide. ₇	 _____ _____ 
Damming a river to produce hydropower can disrupt the local ecosystem causing flooding, changing fish passages, and impacting wildlife habitats. ₇	 _____ _____ 
Hydropower is a renewable source of energy.	 _____ _____ 
Hydropower relies on the water cycle. ₃	 _____ _____ 
Reservoirs can be used for irrigation, swimming, fishing, boating, and other sports. ₃	 _____ _____ 





















Overall view of this energy resource:

Negative _____ | _____ Positive



Energy Pro & Con

URANIUM

Wyoming has the largest uranium reserves in the country. ₁	 _____ _____ 
Nuclear energy is the cleanest energy. ₁	 _____ _____ 
Disasters in nuclear energy plants rarely occur, but when they do, they are devastating. ₅	 _____ _____ 
Nuclear fission can release one million times more energy than fossil fuels. ₇	 _____ _____ 
Nuclear fission generates radioactive waste that can remain hazardous to both human health and the environment for thousands of years. ₇	 _____ _____ 
Uranium is a nonrenewable energy source.	 _____ _____ 
After uranium is used, it is still radioactive. ₃	 _____ _____ 
Radiation is dangerous and has to be dealt with carefully. ₃	 _____ _____ 
About one pound of uranium can produce the same amount of power as 20,000 pounds of coal. ₄	 _____ _____ 
Presently, the uranium produced in Wyoming is mined in-situ (meaning "in place"), an environmentally friendly process involving minimal surface disturbance.	 _____ _____ 

Overall view of this energy resource:

Negative _____ | _____ Positive



Energy Resource Labels



Coal



Energy Resource Labels



Oil



Natural Gas



Energy Resource Labels

Nuclear



Energy Resource Labels



wind



Energy Resource Labels



Hydro



