
Finding a viable option to help USA's search for alternative energy sources: wind energy

Energy is needed all around the world. There are many different types of energy sources. Coal, wind, solar, and nuclear power are four main alternative types of energy sources. The most common sources of energy are gas, petroleum. At this point in time with global energy needs affecting our economic stability, the United States needs to investigate new types of sustainable, domestic, and eco friendly alternative energy sources. They all have pro's and con's. I think solar and wind power would be the best alternative energy resource for the U.S.

Coal is the United States' largest natural resource of energy. The price of producing coal is very low and is not hurting the environment as much as it was in the past because coal burning plants have added scrubbers to wipe away sulfur dioxides. The U.S. does have enough coal resources for at least 200 years. If we use our American coal, we will not need to rely on other countries for our power. The coal mining industry is a huge business; therefore, a lot of coal jobs are available that help more Americans. Coal would provide time for cleaner fuels to be made. Coal produces a lot of sulfur dioxides and its impact on the environment is bad. Coal mines are also very dangerous and have trapped many people in the last couple of years. Coal burning plants create polluted air which generates smog, asthma and acid rain. These air quality problems hurt the American people later in time. I think coal is a reliable energy source for the US, for the short term, but it could harm the environment which would put people in danger.

Solar energy is one of the best energy sources because light is free. Solar panels convert light waves into energy that can be stored on batteries. Solar panels do not need a lot of space, but not all buildings have enough roof space. Solar panels do not require too much maintenance. After the panels are installed, the maintenance includes moving and switching out batteries or generators. Solar panels can power a house, and the local utility company will buy the extra energy. Solar power does not make pollution. Solar powered cars have been created, and this could be a great future for transportation. The problem is that, solar energy does not always create enough energy. The sun is not always shining so the panels cannot always be working. In St. John USVI, our home's hot water heater was powered only on solar panels. My experience was that they did not create enough energy and the outdoor showers were always cold. The sun is shining in Chicago for just over 50% on average per year. The price of panels and batteries are expensive and not practical for large cities power needs.

Nuclear power plants produce a lot of energy. Now the plants have lower greenhouse gasses. The power plant can cost millions of dollars to make, but the price of nuclear power is very low. The power plant needs to be closely monitored and every year the pipes and radioactive material is shipped away in sealed barrels to ensure the safety of the people and are away from people. This is done because the pipes can burst and to get fresh pipes in the power plant needs to drain out the waste. The short term impact on the environment is low, although if the reactor breaks it is a huge problem. The people living nearby are at high risk of getting exposed to radioactive material released into the air. Power plants are also terrorist targets because they can be so dangerous to the people if the core is released into the air. I think nuclear power is the worst because after watching what Chernobyl did to thousands of people, I would not like to have that risk.

Wind is a great way to create energy. Wind power is like solar power because it is a free energy source. To change wind to energy the operator needs a wind turbine. Wind turbines cost a lot of money ranging from about \$16,000-\$20,000 for small turbines. After the operator has purchased the turbine, the wind will do the rest of the work. A large turbine does cost more and an off shore turbine costs the most. Offshore turbines cost more but produce more electricity. Some say that wind turbines take up a lot of space, but they don't have to. There are turbines that are compact and can be placed on rooftops. Also critics say wind turbines are dangerous, but these wind turbines can be placed in a park and there is not a problem, like Humboldt Park in Chicago. Wind turbines are low maintenance because all the operator needs to do is to transport the batteries to the local utility company to sell. Also when the turbines go over 45 mph the operator needs to turn them off. The gears will release and the blades can turn so the turbine stops rotating. Last, the best part of wind energy, is that it does not create any pollution. Wind can be unreliable when the people need power. A negative is that a high amount of birds have been killed wind by the turbines.

I think that there is not one best way to produce energy. I believe that combining wind and solar energy would be the best way to produce energy. I think wind energy is one of the best because, over time, the price of the turbines will go down. There are many new types of turbines that are more efficient, and less expensive. They also do not create pollution and have very low maintenance. Solar energy is similar to wind, and when there is not wind, operators can use the sun. Both of these energy solutions do not create any pollution. Also both of these sources are free sources of energy. Last, once they are built, they both have low maintenance. This is why I think wind and solar energy sources are the best for the school and the U.S. for the future.