

Alternative Energy

As more people become increasingly concerned with the rise of global warming, alternative energy seems to be the next best step to protect our environment. Alternative energy (some may refer to it as renewable energy) refers to other energy sources that are not derived from fossil fuels. Some examples would include the following: wind, biomass, solar, geothermal or wave and tidal energy.

Solution to High Oil Prices Rising oil prices usually produce a ripple effect. When the price used for transporting goods goes up, you will notice that the price of food will also go up. The average person is paying the price for this situation, and cost of living has increased dramatically. More and more households are finding it hard to pay for their basic needs such as food, housing and home heating. If we do not consider using alternative energy sources to support our need for energy in the future, we may experience a global economic recession sooner than we think.

Ethanol Corn and sugar cane are biomass materials that can be used to produce energy through their product called ethanol. It is also known as EtOH, grain alcohol, and ethyl alcohol. Its chemical compound stays the same, whether it came from the corn made in the U.S. or the sugar cane in Brazil. It is also a high octane fuel, which will make your car run with a lot of power while using less fuel. However, the decision to switch to it instead of using oil is still debatable. This is because there are two different publications that are contradicting each other. One result says that ethanol is beneficial to the environment, while the other reveals that it is harmful and its use will contribute further to the earth's global warming. These findings create too much controversy that delays worldwide governments to pursue the big switch. More studies are now being developed to ensure that using ethanol as a primary energy source will really eliminate too much dependence on foreign oil, boost agriculture once more, and reduce the impact of the emission discharged by greenhouse gases.

Geothermal Energy Today there is heavy pressure to scientists worldwide to tap on other alternative energy sources. They have discovered that geothermal energy is another sustainable and renewable power that we can use to generate electricity. This kind of energy originates deep within our earth's core. It uses the heat in our planet that can generate enough steam to power a turbine and to produce electricity. The temperature in the core of the earth is measured to be about 4,000 degrees Celsius. If you will go down deep into the earth, you will find that the mantle surrounding the core is located only 45 miles below its surface depending on which part of the earth you stand from. Currently, nobody has actually reached that depth of the earth. So how can we use this energy?

Scientists has identified geothermal hotspots all over the globe, these are locations where geothermal heat like that of the volcano are surfacing. Because the mantle in this area is less thick, the internal heat coming from the deep can reach the surface and can be tapped to turn heat into mechanical or electrical energy.

Wind Power Why not use the power of the wind to produce energy? It is abundant and definitely free. But one of the reasons why it has not been further explored is because of the high cost of the set-up. Initially, the government has to start up a wind farm. But once this initial cost has already been met, wind energy can be one of the cheapest sources of electricity you can ever find. Compared to ethanol which you must produce, wind is free and is readily obtainable. Currently, wind power accounts for only a small amount of energy that is used worldwide, and the top producer is believed to be Germany. It is also said that Denmark produces 20% of their current electricity by using wind power. There is a big potential in exploring the use of wind power although it is not getting the exposure it deserves. The government needs to be enlightened that once windmills are put up, they can provide the electricity which we use to light our homes, cook our food, and warm ourselves.

Solar Energy For billions of years, the sun has produced a lot of energy. Solar energy refers to the sun's rays or radiation that reaches the surface of the earth. These can also be converted to power and electricity. Solar energy is converted into electricity in only two ways:

1. Photovoltaic (PV) devices or the so-called "solar cells" can change sunlight directly to electricity. PV systems are located remotely and not connected to any public electricity grid. They can also be used to power television, radio and even medical devices.
2. Solar power plants can indirectly convert solar heat using thousands of solar thermal collectors. It collectively heats up water which produces steam, which then turns a turbine that will produce electricity. However, there are major disadvantages of using solar energy. The amount of sunlight that we receive is not constant. It will depend on the weather conditions, location, time of day, and time of year. Also, the sun does not deliver too much energy at any one place for long periods of time, and big surface areas may be needed to collect this energy to be useful on a large scale.

Finding sources for alternative energy to provide the power needed in our present world should be a priority across the globe. It is not only our government that should have this burden, but as citizens we should also do our part in conserving precious energy. Start by saving electricity in your home as a small contribution. We depend on this earth for the resources we need and if we do not control the rate we are depleting it, we should not be surprised if there will be nothing left for the future generation.