

# Alternate sources of energy essay

[Business](#), [Industries](#)



Alternative Energy Sources In our homes, at our workplaces, and in our leisure, humans consume energy in every activity at alarming and around the clock pace. We have past the days of wind-up clocks and toys, foot-pedaled big wheels, and hand-cranked cars. Today, everything we operate comes fully loaded with all the 'bells and whistles', neon lights, and fancy remote functions. But at what price is this costing us, our environment, and our future. Alternative energy sources, also known as renewable energy, are energy sources produced from natural resources rather than fossil fuels or from the production of nuclear reaction. Unlike traditional fossil fuels, renewable energy sources such as sunlight, wind, water, and geothermal heat are replenished naturally in our environment as a reoccurring worldly function. As our world population continues to grow and the demand for energy increases, it is evident that we will one day deplete our natural resources and will solely rely on alternative energy sources. Currently, alternative energy is a limited resource of energy that powers some homes and businesses.

Due to the expensive nature of the production of renewable energy sources, many people still rely on traditional fossil fuels as a source of energy for heat and electricity. However, if widely affordable, renewable energy is the best source of energy due to limited emissions as compared to the burning of fossil fuels. Renewable energy sources are very clean sources of energy; however, there is pollution associated with the production process, materials, and facilities used to extract the energy. Primarily, alternative energy is generated from the sun, wind, water, and geothermal heat which are abundant and renewable sources to the Earth. The energy obtained from

these sources are converted through a specific and relative process to its function and is then distributed as electricity and heat which is used for ordinary household functions to commercial and industrial processes. In fact, a portion of the energy produced is redistributed back into the production process to continue the cycle and cut energy costs.

Besides, it takes energy to make energy. Looking at several forms of renewable energy, we will dissect the process for converting energy from the sun, wind, water, and geothermal heat. Most of the energy from the sun is collected by solar power which is the process of using photovoltaic panels to generate electric power. As the sun enters these panels, the current produced is sent to a converter which enables the user to receive the energy in the form of electricity. Solar panels often provide a source of energy in remote locations, but can be used on homes and businesses, greenhouses, water heaters, traffic and warning lights, or grouped together as a solar power plant. Wind power is used in a similar application and is collected by wind turbines. Wind turbines (resembling large fans), can be on or off shore in a farm-like appearance.

The energy is collected as the wind turbines spins and rotates a generator to produce kinetic energy which is converted into electricity. As a practical application, wind farms are located in an area that favors constant high wind speeds. Water power is the process of producing energy through the natural flow of water without adversely affecting the water source. Wave power, tidal power, and hydro power are essentially all processes in which water can be used to make energy, but let's focus primarily on hydro power. Hydro power

is the process in which energy is produced through a controlled damming system called a hydroelectric dam. In this process, the dam is constructed between a large body of water and a river system in which it empties into.

With the dam in place, the water flow can be regulated to allow a steady flow to run through a system of turbine engines which power attached generators which create electricity, similar to the wind turbine process. The electricity generated from this process is then transferred to a powerhouse where the energy is converted and sent through power lines to be used as an energy source for electricity and heat. The last process of mention is geothermal heating. Geothermal heat is a fascinating process in which heat is extracted from the earth's core for the production of steam that is used to produce energy. In this process, magma is extracted through a drilling process and funneled through a production well as it naturally flows to the surface and emptied into tanks where the magma and steam is naturally separated.

This process allows the magma to settle at the bottom of the tanks while the steam rises and continues the production process. There are two additional tank systems that the magma must cycle through before this process is complete. Upon completion of the separation process, the steam is passed through a system of pipes which is released into several turbine engines with attached generators that facilitate the production of the energy. The most functional and environmentally safe application of this process is the return of the used magma to the earth's core through an injection well. The return of the magma allows the earth's core to be replenished allowing the magma to be reheated for future usage. In all these renewable energy production

processes, the original source can be harvested for its energy without any physical damage and returned to its original state for reuse.

This is an advantage to mankind because the source is never depleted. An additional advantage to mankind is that the production of renewable energy sources creates jobs. As technology increases in the production of alternative energy sources, the job industry for renewable energy jobs will as well. According to the UN Environmental Program Team, “ efforts to find new energy sources creates jobs and investment – a process that will accelerate with the inevitable shift from fossil fuels to wind, solar, and geothermal power” (Beard, 2008). Additionally, renewable energy employment will account for roughly twenty million jobs by 2030. Creating jobs and producing energy from renewable sources also allows for the elimination of dependency on foreign oil and other resources. Alternative energy sources are the way of the future, it is happening now. They are clean, efficient, and safe ways to power homes, businesses, and much more.

Renewable energy sources allow us an opportunity to preserve our environment and protect our resources for our children’s future. Is there any better reason? ? Bibliography Beard, D. (2008, September 25). The Green Blog. Retrieved September 21, 2009, from The Boston Globe: [http://boston.com/lifestyle/green/greenblog/2008/09/un\\_millions\\_of\\_green\\_jobs\\_to\\_b.html](http://boston.com/lifestyle/green/greenblog/2008/09/un_millions_of_green_jobs_to_b.html)

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