

Alternative Energy Solutions In A Time Of Power Crisis

It is unofficial - but around the world many of us agree on one thing: it is very likely that there will be an energy crisis in the future. We all know energy is a big issue in the contemporary world, and we have been convinced that humanity is at a crucial crossroads in its history because we face an energy shortage. Many experts believe this problem can only be solved by the use of alternative energy solutions.

By energy, I mean the fuel that drive our cars, give us electricity and enables us to enjoy modern amenities we feel so vulnerable without. Fossil fuels have been the prime source of energy for human society since the beginning of the industrial revolution. These fossil fuels have been the muscles, which have enabled us to progress and develop to such dizzying heights. We face a problem in the 21st century because our stocks and reserves of these fossil fuels are running low; this news is worsened by the fact that these reserves cannot be renewed. Many governments and private agencies have started promoting Alternative Energy Solutions to overcome the looming energy crisis caused by the depletion of the non renewal's sources of energy that all fossil fuels - coal, all oil and natural gas - represent.

Alternative Energy Solutions include all prime movers that can use a renewable natural resource to produce energy. This may be wind, thermal energy from the earth, and wave action in the shores and solar energy from the sun. Alternative energy resources can also include new technology like fuel cells. However the primary fuel humanity has long depended on has been oil. We now know from our own projections that the oil reserves in the world are slated to be unviable by 2050. Simply put, the world is running out of gas! In addition, not to mention, time.

The utilization of other forms of energy is therefore very important. When we speak of alternative energy, it usually means the production of electricity via the use of some natural and renewable resource. What are these renewables, one may ask. Someone else may extend this line of questioning and say: Are these renewable resources as efficient as the fossil fuels? Below are some answers.

Wind energy is the word that comes to mind whenever people talk of renewable energy sources. Humans have harnessed the wind to drive machines since medieval times. In the 21st century we use wind turbines to produce electricity. As a source of power, wind is an excellent option. Wind turbines generate electricity by rotary motion that is caused by the airflow.

Some of the negatives associated with wind energy and wind turbines lie in the unpredictability of wind. For example, no wind means the turbine does not rotate and electricity is not generated. Sites are another problem; rows and rows of wind turbines are just not feasible in a city of a few million people. The most important issue however lies in cost effectiveness, most power companies are still reluctant to invest in or buy their power from companies that use wind turbines. This is changing as governments around the world have started subsidizing power generation through alternative sources like wind.

There are other possible sources of renewable energy; tidal energy uses the energy of the ocean and is an effective though rather geographically limited source of power, thermal energy from the earth taps geysers and other underground sources of heat. This is a very important source of energy in places like Iceland - it is also geographically limited in its suitability. Nuclear energy can be considered a potentially inexhaustible source of power. However, it could have many dangerous complications and most environmentalists fear its use.

New technological innovations like fuel cells are still a long way off from truly becoming substitutes to the fossil fuel powered internal combustion engines that have driven us all this far down the road. Indeed looking at all the possible sources of alternate energy and especially renewable, wind and hydroelectric projects are the only two viable long term sources, solar power is a potentially huge alternative source of energy but it has a technological handicap-we do not possess the engineering expertise to make better solar cells. Solar cells are also very costly to produce and are not cost effective - even less so than wind.

Given all the setbacks we currently are unable to overcome, it will still be some time yet before we can throw away the polluting but efficient, fossil fuel guzzling machines that we so fondly know as cars. The use of alternative energy sources is a very important area of research and demands humanity's attention.

As soon as fuel supplies run out on us, we may have to go back to that ultimate transport machine to take us places: our legs.

Source: <http://www.articlecircle.com>

About the Author

Isabel Baldry is covering a wide range of interests for various publications. To know more facts about alternative energy solutions please visit

