## Critical thinking on sustainable energy

Education, Sustainability



## **Sustainable Energy**

Sustainable energy sources are relatively cheap and are infinite, meaning that they would never run dry. Some sources of renewable energy which a sustainable society would draw its energy in the future includes Solar energy, wind and hydropower.

Solar energy is the ultimate source of power. It contributes either directly or indirectly to the other forms of generating energy. Solar power comes from the sun. The sun remains the greatest energy source for our solar system. Solar energy can be utilized in lighting and cooling buildings, generating electricity, heating purposes and other large scale industrial uses. A sustainable society would chose to generate power from solar energy because it is clean and does not cause pollution to the environment. Moreover, solar energy would continue to be available for harnessing as long as the sun continues to shine. To date, research is still going on to reduce the cost of producing solar panels used in trapping solar energy. Its long term sustainability is guaranteed as the source of energy is always available.

Another form of energy which a sustainable society could use is wind energy. Wind energy is formed when warm air ascends and cooler replaces it, the current so formed is called wind. This form of energy has been used to operate wind mills that grind grain. As of today, the energy can be captured by turbines to produce electricity, which can in turn be used for a wide range of activities. It can be used to power homes and businesses. Wind energy is also clean and does not pollute the environment. It is inexpensive to operate. In recent times, moreover, the cost of setting up a wind power plant has

been on the decline due to improved technology, also leading to better generation techniques. Wind power is a major source of mechanical power and electricity. A sustainable society should really be thinking of integrating energy generation from wind power into their plans for future energy generation. Long term sustainability is assured as the pattern of wind does not vary much year in, year out.

Hydropower is another source of renewable energy that a sustainable society should adopt. The pressure created by the water falling from a height, or running water is used to power turbines. The energy harnessed from falling streams of water has been utilized from time immemorial. It can be used to provide both mechanical and electrical forms of energy. This form of energy is also flexible, as it is quite easy for more power to be generated by releasing more water and when the demand is low, moreover, the water can be reserved. With this remarkable scalability, hydropower still stands out as one of the most efficient forms of renewable forms of energy. A sustainable society should be thinking of how to utilize hydropower for generating its energy. Also, its long term sustainability is assured as streams and rivers run naturally, except by human actions that alter them.

A sustainable society should definitely not be thinking of generating energy from coal, natural gas or fossil fuel. Aside from the fact that these forms of energy are not renewable, its utilization has been shown to contribute to global warming in no small way. However, the fact that they are very cheap sources of energy has made their use prevalent in today's world. It is important to develop the clean renewable forms of energy and make the use

of fossil fuel, gas and coal unattractive in order to ensure the sustainability of our environment.

## References

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