

IS ALTERNATIVE ENERGY A POSSIBILITY?

Nowadays most of the energy we use comes from burning fossil fuels, but as everybody knows this has a negative impact on the environment, both because of the high carbon dioxide emissions and because it is one of the main causes of global warming. Besides, traditional fossil fuels will no longer be available in a few decades'time. For these reasons scientists have been looking for 'alternative' sources of energy and they are studying the possibility of using renewable energy generated from natural resources, like sunlight, wind, tides and geothermal heat.

This is not the first time in history that alternative forms of energy have been researched. For example Europe was close to an ecological disaster at the end of the Middle Ages because of huge deforestation. A solution was found by using coal instead of wood. At the beginning of the 19th century whale oil was used for lighting lamps, but the number of whales began to fall dramatically after the middle of the century. The consequence was that this oil became so expensive that it was soon replaced by petroleum, a new source of energy at that time.

In 1917 Alexander Graham Bell supported the use of ethanol (a type of alcohol) from corn as an alternative to coal and oil. An ethanol fuel programme started in Brazil in 1970, where residual sugar cane is used to produce heat and power. Today Brazil is the first exporter and the second largest producer of ethanol after the USA, and all cars in Brazil can use both this fuel and petrol.

Today the major investments in alternative energies are focused in three directions: solar and wind energy and hybrid electric vehicles. Compared to the production of fossil fuels, these kinds of energy can be produced with basic equipment and naturally basic processes. Moreover, renewable energy is free and has lower carbon emissions.

Sometimes biomass (dead plant and animal material) is considered as an alternative to fossil fuels, but up to now the results have not been very encouraging. Some years ago the Netherlands were a leader in the production of palm oil as a biofuel, but then research proved that its use was more harmful to the environment than fossil fuel. Moreover scientists have come to the conclusion that the production of biofuel from other food sources is not enough to cover the demand, and that its production would increase the price of food and create or intensify other problems like global warming or dependence on foreign energy. For these reasons scientists are still testing other alternatives, such as biogas digestion and helioculture.

READING COMPREHENSION

- **DECIDE IF THE FOLLOWING STATEMENTS ARE TRUE OR FALSE. CORRECT THE FALSE ONES.**

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| 1. In the future, there won't be any fossil fuels. | T | F |
| 2. Alternative energies have never been researched up to now. | T | F |
| 3. Palm oil replaced whale oil as a source of energy to light lamps. | T | F |
| 4. Brazil doesn't make use of ethanol as a source of energy. | T | F |
| 5. Biofuel will be the solution to the future lack of non-renewable energy. | T | F |

- **ANSWER THE FOLLOWING QUESTIONS.**

1. Why are scientists looking for alternative sources of energy?
2. Can you give some examples of renewable energy generated from natural resources?
3. What source of energy did people use at the beginning of the 19th century? Why?
4. What kind of energy did Alexander Graham Bell was a supporter of?
5. In which directions are the major investments in alternative energies focused today? What are their advantages?
6. What disadvantages can the production of biofuel cause?
7. What's your opinion about the use of renewable sources of energy instead of fossil fuels? Have you ever read articles or seen documentaries about environmental problems? Which alternative energy do you think will be the most successful in the future? Why? Do you care about our planet environment? What can people do in their everyday lives in order to save it from pollution and consequent destruction?