

"RENEWABLE ENERGY"

Versión inglés.

FIRST PART

1. Global warming and energy consumption.
2. The climate has always been changing; the bad news is that in the last century it has done so very quickly.
3. Some scientists say that global warming is due to the emission of greenhouse gases.
4. The greenhouse effect is the accumulation of solar heat on the earth because of some gases in the air.
5. Gases that cause this effect come from industries, automobiles, fuel combustion, etc.
6. The greenhouse effect is made worse by the deterioration of the biosphere, by, for example, the felling of trees, water pollution, etc.
7. Lately we have seen big hurricanes, rivers overflowing by rain, ice melting on the poles.
8. It is therefore necessary to encourage the use of clean technologies for power generation.
9. Fossil fuels like oil, coal or natural gas will get exhausted.
10. Nuclear plants have the disadvantage that they produce radioactive waste which is dangerous for 50,000 years.

SECOND PART

11. What is renewable energy? Types:
12. Renewable energy is that produced on a continuous and inexhaustible way, and which is environmentally friendly.
13. The sun is the source of all renewable energy.
14. It causes the pressure changes on the earth that originate the wind: and with it, wind power.
15. It allows the plants to grow and live: and so it is a source of biomass power.

16. It is the direct source of solar energy: in the form of photovoltaic energy and thermal energy.
17. It produces evaporation which, in turn, causes the formation of clouds and, as a result, rain: which is a source of hydropower.
18. Geothermal energy is obtained from underground, recovering heat from the interior of the earth.

THIRD PART

19. Advantages and disadvantages of renewable energy.
20. Advantages:
21. Most types of renewable energy do not produce emissions of carbon dioxide or other polluting gases into the atmosphere.
22. It does not generate waste which is difficult to treat.
23. It is inexhaustible.
24. Most types are available in all countries.
25. It creates more jobs than conventional energy.
26. Disadvantages.
27. Hydroelectric power stations can cause problems for the migrations of some types of fish.
28. The equipment to store electricity is expensive.
29. Biofuels generate a bigger amount of carbon dioxide, by unit of energy produced, than fossil fuels.
30. Solar energy is limited to daytime hours.
31. Wind power depends on weather conditions.

FOURTH PART

32. Different elements in a photovoltaic energy system.
33. Here we have the different elements in a photovoltaic energy system.
34. The panels.
35. The charge controller.

- 36. The batteries.
- 37. The inverter.
- 38. The panels receive the sun rays and transform them into electricity.
- 39. They are connected to the charge controller. The angle is important to get the maximum energy.
- 40. The charge controller is connected to the batteries.
- 41. It regulates the current coming from the solar panels and going to the batteries, and prevents reverse current flow.
- 42. Batteries store electricity to be used when it is needed, for instance at night.
- 43. The inverter is connected to the batteries.
- 44. This turns the energy in the batteries into energy which can be brought to our homes.

FIFTH PART

- 45. Conclusion.
- 46. We must change our lifestyle in order to save energy. But how?
- 47. By recycling. Because recycling means saving energy.
- 48. By rationalizing water consumption, which saves water and energy.
- 49. By using public transport.
- 50. By choosing class A appliances (with high energy efficiency).
- 51. By replacing incandescent light bulbs by low energy light bulbs.
- 52. By not overusing the air conditioning or heating systems.
- 53. Do not be part of the climate change problem. Be part of the solution.
- 54. Planet Earth is our home and we must preserve it for future generations.