

## **Alternative energy sources**

*(about ways of producing energy that are less destructive of the environment)*

Ladies and gentlemen,

Our society has a huge appetite for electricity. We use electricity for light, heating, cooling, getting up to the top floors of our tall buildings, powering our mobile phones and televisions and computers. To produce electricity, we burn coal. Coal is a fossil fuel; burning it releases carbon dioxide into the atmosphere. Carbon dioxide is one of the so-called “greenhouse gases” that are causing global warming and affecting the climate of the whole planet.

Clearly, we cannot go on like this. We need to find alternative sources of energy so that we can reduce our dependence on fossil fuels and stop poisoning the atmosphere with greenhouse gases. So, what are our alternatives?

One alternative that is very fashionable right now is natural gas. Natural gas is a much cleaner fuel than coal, produces much less carbon dioxide when it burns. But gas is also a fossil fuel, and eventually, it will be exhausted – we will have used up all the natural gas available.

There are alternative sources of energy that will never be exhausted. Wind, water and sunlight will be with us for as long as the earth lasts. And we are getting rather good at producing electricity from all of them.

Humans have been producing electricity from water power since the 19<sup>th</sup> century. But hydroelectric power has its problems. To create enough water pressure to drive the turbines, you have to build a dam, and a large area behind the dam will be flooded, destroying habitats for both humans and animals. And the dam upsets the ecology of the river where it is built, with consequences for farming and fishing.

Wind energy is another possibility. We’ve all seen the huge wind turbines going up here and there in the landscape. They’re not exactly beautiful, and they can be dangerous to birds. But the main problem is that they are not very reliable. They work only when the wind is blowing, and usually only when it is blowing from a specific direction.

Sunlight is probably the most attractive source of alternative energy. At least in sunny places like Greece, it’s pretty reliable. The solar panels take up a lot of space. But they can be placed almost anywhere – on the roofs of buildings, for example.

Producing energy from sunlight will require a considerable initial investment, because the solar panels are rather expensive to install. But once the panels are installed, they need practically no maintenance. And we can then use the sunlight to make all the electricity we could possibly need, forever.

Thank you.

(422 words)