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ADVANTAGES AND DISADVANTAGES OF ALTERNATIVE ENERGY SOURCES

ПРЕИМУЩЕСТВА И НЕДОСТАТКИ АЛЬТЕРНАТИВНЫХ ИСТОЧНИКОВ ЭНЕРГИИ

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Mankind needs to reduce the use of fossil fuels and increase the generation capacity for alternative energy sources on the planet because the changed weather conditions is already causing drought, floods, extremely high temperatures during the summer or extremely low temperatures during the winter.

The violent weather conditions on the entire planet and deadly tropical storms, and threatens to destroy the entire civilization if we don't do something to reduce the level of air, water and soil pollution on the planet. This article aims to show you what are the advantages and disadvantages of alternative energy sources, to better understand why we have to use them as a cleaner alternative to fossil fuels.

Alternative energy also known as renewable energy is the energy that is considered an alternative to fossil fuels. Here we find the green energy sources, which are also renewable and are produced by the sun, wind, hydro, geothermal heat, bio, waves, rain, waste and other sources of clean power.

There are many advantages produced by alternative energy when we replace fossil fuels with cleaner sources of power. Fossil fuels are considered non-renewable energy sources because they are finite sources of energy due to the fact that they will run out in just a few decades. Alternative energy is considered

a renewable energy source because provides a sustainable and stable supply of clean energy in the long term.

Alternative energy is good for the environment because renewable energy sources like wind and solar produce zero emissions. Biomass is another renewable energy source (trees regrow) that produces very low emissions (lower than natural gas).

Alternative energy is considered a reliable source of energy because the technological development in recent years allowed these clean energy sources to enter more and more into the global energy mix. However, the renewables represent today a very small percent in the world energy mix, but the continuous technological development of the human society will allow the alternative energy sources that are less reliable today to consolidate their position in the energy mix of every country up to the level when the world energy mix will consist only of renewable energy sources.

Alternative energy sources are the solution to getting energy independence for every household. In the society of the future every household will produce and store its own clean electricity produced by the renewable energy sources available in that place.

Places with plenty of sunshine will harness the power of the Sun to produce clean electricity that will power the house during the day, but also during the night with the help of advanced energy storage devices.

Disadvantages of Alternative Energy Sources. Alternative energy has a few disadvantages mainly represented by the low-carbon energy sources, which are not entirely clean. The today's technology used to generate renewable energy (clean electricity) has its limits.

The low efficiency specific to these technologies creates a problem with the feasibility of such projects because the investment may return in a long period of time, which in some cases does not justify the initial investment.

Sadly, even if alternative energy sources have appeared to replace the fossil fuels that pollute, the green technology of today is still expensive for most of the population. Without governmental incentives and subsidies that support the development of the green energy sector in the world, many green projects developed today would be remained only on paper.

If we take each alternative energy source to see if it represents a constant source of clean energy, we see that some of them rely pretty much on weather conditions. Solar panels do not produce electricity during the night, and produce less electricity during winter or during cloudy and rainy days.

Wind turbines produce clean electricity during the day and also during the night, but only if there is wind. Wood chips that are burned as biomass to produce low emission electricity requires huge quantities of wood (to produce wood chips) every year.

Biomass is a reliable source of power. However, the latest energy storage devices available on the market allow us to store the clean electricity produced by our solar panels or wind turbine for a later use (during cloudy days, during the night or during days without wind).

Also, if we want to have a continuous source of clean power at our disposal, we need to combine solar and wind power because if there is no sun, it means that is night, or it is a cloudy day, so there are plenty of chances for a good wind that can be used by our small turbine to produce clean electricity. Is less developed compared to the potential of power generation from fossil fuels. Today, is very difficult to generate enough clean energy to power a medium town, a big town or even an entire country.

Renewable energy is produced in small scale compared with the global demand of energy, and to increase the generation capacity in the world up to a level which would count in the global energy mix, we need to use large surfaces of land (which can be used for agriculture) and huge financial efforts of the governments around the world.

Green technology needs to evolve in the future to replace the dirty energy produced by fossil fuels. An improved efficiency of the devices used daily, would decrease the power consumption on the planet and would make renewable energy more efficient. The further decrease in costs for installing solar PV systems and wind turbines would facilitate the creation of new green projects around the world that would increase the generation capacity and the presence of the alternative energy in the world's energy mix.

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