Renewable energy sources

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Solar energy and wind energy as Renewable Energy Sources. Renewable Energy Sources are natural, repeatable natural processes that allow for the production of the so-called green energy. This energy is beneficial for the natural environment and, in addition, cheaper. The article presents two types of sources from which energy is obtained - clean and safe for the environment.

The first of these sources is solar energy - the richest source of energy. It can be used for heating and electricity production. In the first case, it is done using systems that mechanically transfer heat by means of working fluids, i.e. oil, water or air. Among all the methods of processing solar radiation, it is currently the most efficient way to use energy, which is used for homes heating or the production of domestic hot water, and accounts for as much as 80% of the use. A characteristic feature of solar energy as well as wind energy is its high variability. The amount of solar radiation reaching the earth's surface varies depending on the time of day, year, orientation towards the sun and climatic zone. The second source of renewable energy is wind energy. It is the kinetic energy of moving air masses. Wind turbines are needed to generate electricity from wind, and windmills and wind pumps to generate mechanical energy. In order to generate a significant amount of electricity for the market, wind farms are created, which consist of many turbines placed close to each other. The strength of wind energy is significantly influenced by the shape and management of the area.

Renewable energy sources are gaining more and more popularity in Poland, thanks to which the natural environment gains clean air and at the same time more opportuninities for human being to live better. Nevertheless, there are still some opponents of implementing such kind of solutions. What is your point of view? Can you see any advantages of renenewable sources of energy?

Should home heating with coal be banned?

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There is a lot of discussion in the media about banning coal burning in furnaces. Among the energy sources currently available, coal is still the most efficient and cheapest energy fuel, and modern coal-fired boilers are becoming less and less cumbersome to use - no wonder coal remains the most popular heat source. However, coal can be inconvenient and - if of poor quality - bad for the environment.

There is no doubt that using coal allows you to reduce the costs of heating your home - this fuel is still relatively cheap. What is equally important, coal prices are quite stable. Another important advantage of this heating material is its availability. We should not have any problems with its purchase, which should be an important element of taking a decision concerning the heating system. We should also have no problem with its transport.

The biggest disadvantage of heating homes with coal is the release of carbon and sulphur dioxide. Coal high carbon content makes it the number one contributor of environmental CO2 emissions.

Heating with coal is time-consuming - it requires regular fuel adding. After burning, ash remains in the atmosphere - has to be removed - this also takes some time.

To sum up, heating with coal has more disadvantages than advantages, one feature trumps all imperfections: low price. However, heating with coal can be hazardous to our health and the environment through carbon dioxide. This should convince people that this form of heating should be banned.

Should coal heating of houses be banned?

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Coal heating has many disadvantages – it stains walls, clothes and requires frequent visits to the boiler room. Howerer, it has one advantage that makes up for some of these imperfections: it costs little. Coal is the cheapest fuel in Poland, and it is also easily avaible.

Why are CO2 emissions from heating houses with coal harmful to our health? Their porous structure means that they can irritate the mucosa in the respiratory system. As a result, you are more susceptible to infections, as well as your risk of asthma or chronic lung disease. That is not everything. The dust has a negative effect on the liver and aggrevates allergy symptoms. Moreover, it is especially dangerous in that they are able to penetrate the blood system as well. Additionally they contribute to inflammation which results, for example, in atherosclerotic changes. When they get into the bloodstream, they can also quite easily end up in the brain or heart. Dust pollution also increases the risk of cancer. All this translates into higher mortality in regions with high levels of emissions of this type of pollutant.

Yet, the use of coal as a fuel has an advantage. There is an evolution- good caloric value, efficiency and availability, make high-quality coal an exellent fuel and it is worth betting on it precisely for this reason.

This problem is very important in coal mining. Attention must be paid to the sinterability parameters of coal, as large lumps can be formed and thus the combustion area is smaller, and air has limited access to their interior. This can reduce the efficiency of the furnace. As this happens, combustion becomes uneconomical – the sinter burns slowly and ineffectively. Coal with high sinterability is a misguided purchase because the fuel, for which we have paid a lot, is not completely burnt. The so-called no afterburn remains after it, i.e. More combustible parts from unburned raw material appear in the ash. High sinterability also means the production of an excessive amount of ash, the removal of which is necessary to keep the furnace in good working order. So it is time consuming and must not be forgotten.

As far as I am concerned, heating houses with coal schould be prohibited. We must realize that heating the houses with coal is harmful to our health and to others, despite the fact that it is cheap. Our health is the most important.