

GLOBAL ENVIRONMENTAL PROBLEMS OF OUR TIME

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Today's environmental challenges make us vulnerable to disasters and tragedies, both now and in the future. Around the world, people are facing many new and complex environmental “disruptions”. Some of them are small and affect only a few ecosystems, while others dramatically change the living conditions that we consider normal.

Our environment is critical to the existence of life on Earth. When we damage the environment with man-made waste, it leads to serious environmental problems for our planet.

1. Climate change.

First of all, here we are talking about global warming. It is this that has worried environmentalists and ordinary people around the world for several decades.

And this is the result of human activity – we are talking about greenhouse gas emissions. Global warming is increasing the temperature of the oceans and the earth's surface, causing melting polar ice caps, rising sea levels, and unnatural weather conditions that lead to floods, snowstorms or, conversely, desertification.

2. Deforestation.

Deforestation around the world is picking up alarming speed. This problem causes irreparable harm to the vital habitats of many plants and animals and leads to the loss of biodiversity and the deterioration of the state of important ecosystems, as well as to an increase in the greenhouse effect due to a decrease in the volume of photosynthesis. Yes, forest is a renewable resource, but the intensity of deforestation in the modern world is not comparable to the rate of its renewal.

3. Water pollution.

By dumping many chemicals into water sources such as the sea, rivers, lakes and oceans, we pollute the main source of consumption of all animals, birds and people. In addition, the dumping of plastic into the ocean has become a major killer of many aquatic organisms.

Every year, more than 26 million tons of oil products, a huge amount of non-degradable substances, products of the chemical and military industries enter the world ocean, which in turn affects marine life.

4. Destruction of the ozone layer.

About 30 kilometers from Earth, there is a thin ozone layer that absorbs ultraviolet rays. This gives us protection against many skin diseases, including cancer. The ozone layer is destroyed by freon-based aerosols, aircraft and spacecraft engines. Further destruction of this layer of the atmosphere can radically change the climate of the planet. Depletion of the ozone layer is a major cause of the rise in skin cancer worldwide.

5. Loss of biodiversity.

On our planet, there is a huge number of species of flora and fauna that live in different regions and natural zones. For several centuries the number of plant and animal species has been decreasing at a high rate. We have already lost about nine hundred thousand species, and this figure continues to grow. Based on its needs and requirements, humanity continues to destroy the natural habitat of living organisms, cutting down forests, reducing the number of reservoirs, changing the natural river beds, and so on.

6. Air pollution.

The most obvious danger of atmospheric pollution is the shortage of clean air, but no less serious problem is the planet's climate change and the further consequences of this process. The main elements that pollute the atmosphere are: emissions during the operation of industrial enterprises; exhaust from cars and other vehicles; radioactive objects; waste (household and industrial).

7. Soil pollution.

Soil is a resource that belongs to the category of non-renewable, in case of its loss or degradation, we will not be able to restore it in any way. Soil conditions have a direct impact on the

food we eat, the water we drink, and our health – our internal organs and our lifespan. Soil pollution occurs regularly through the disposal of waste in the ground, and not only by enterprises, but also by ordinary people.

It is no exaggeration to say that the planet is our mother. It feeds us, gives us water, dresses us, and gives us comfort. But taking advantage of all these benefits, humanity not only does not take care of its main treasure, but also ruins it. Today there are many international organizations advocating for the prevention of environmental pollution and aimed at solving many problems. There are many ways to solve this problem, but it is necessary to understand that these methods do not work within a narrow framework. Dealing with environmental problems is necessary for all enterprises throughout the world.

The fate of our planet and our future generations depends on the present generation.

References

1. 13 экологических проблем, которые все еще актуальны. URL: <https://bakertilly.ua/ru/news/id43410>
2. Top 5 Environmental Issues That the World Should Focus on in 2021. URL: <https://www.plasticcollectors.com/blog/top-environmental-issues/>
3. Глобальные экологические проблемы современности. URL: <https://airnanny.ru/blog/globalnyie-ekologicheskie-problemyi-sovremennosti/>
4. ТОП-8 экологических проблем земли нашего времени. URL: <https://xn----stbmju3c.xn--p1ai/a224466-top-ekologicheskikh-problem.html>
5. Проблемы экологии в современном мире. URL: <https://biosfera92.ru/poleznye-stati/problemy-ekologii-v-sovremennom-mire>

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ENVIRONMENTAL HAZARDS OF LITHIUM BATTERIES

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Nowadays, all countries operate powerful factories for the production of lithium-ion batteries for various needs. In the first place, they can be found in flashlights, phones and even cameras, but the advance of new technologies has reached the introduction of lithium-ion batteries in cars [1].

The purpose of this article is to research environmental hazards of lithium batteries and to compare them with the hazards from conventional battery types. The first comparison is of lithium-ion batteries with internal combustion engines, what danger they would pose in comparison with electric cars.

Statistically speaking, the emission of gases from internal combustion engine cars is harmful enough to endanger the outside world. Nevertheless, there is one disregarded problem. The production of batteries with lithium-ion composition will exceed the level of environmental hazard compared to traditional internal combustion engines. It is convenient to consider the harm of the battery to the environment using the example of an electric car for several reasons. Firstly, an electric car uses a huge number of batteries [2]. The impact of thousands of batteries installed in a car is much more revealing than the hazard of a single battery in a smartphone. Secondly, the benefits or harms of green technologies conveniently stand out against the background of traditional cars. Thirdly, the most common models of lithium batteries are most often used in electric vehicles. Next, the process of operating the batteries begins. In the process of driving, an electric car does not emit harmful gases unlike an internal combustion engine, however, these gases are emitted by an electric