

## Combustion of fossil fuels: features

Fossil fuels include fossil coal, oil, peat, natural gas, gasoline, coke, and so on. Special combustion devices are used to **burn fossil fuels**. Among them there are the following [furnace units](#):

- with a fixed layer - the fuel lies freely on the grate and is blown from below by air;
- fluidized bed - designed for the **combustion of fossil fuels**, the size class of which varies from 0.6 to 0.25 mm;
- chamber furnace - fuel, and at the same time air, is supplied by direct or twisted streams by means of burners. Designed for gaseous, liquid or solid fuels. The last type before burning is ground in special mills to a dusty state.

Today there is a need to renovate and replace existing boilers with modern ones, which help reduce the effects of **global warming**. They are more efficient, characterized by reduced fuel quality requirements. As well as equipment that does not have negative consequences for the environment.

## What is the greenhouse effect

The idea of the existence of the **greenhouse effect** and its mechanism was first set out by the French physicist Joseph Fourier in 1827. The main reason for this phenomenon is the excessive content of greenhouse gases in the atmosphere. It is with greenhouse gases, as well as with human activities, that scientists link the inevitable climate change, including **global warming**. Centuries ago, this environmental problem already existed, but it was not so obvious.

The reasons for the greenhouse effect are as follows:

- industrial use of combustible minerals. When burning coal, oil, and natural gas, a huge amount of carbon dioxide, water vapor, methane, and nitric oxide is released into the atmosphere;
- deforestation. This is a serious threat to the **environment**, because forests are the "lungs of the planet" and with the destruction of each tree, the amount of carbon dioxide in the air increases;
- vehicles. Cars and trucks emit exhaust gases that pollute the air and increase the **greenhouse effect**. However, the installation of [car charging stations](#) at gas stations will help reduce harmful emissions and consumption of fossil fuels;
- development of agriculture. The decomposition of animal products is a large amount of methane.

In addition to human activities, natural causes also contribute to the strengthening of the **greenhouse effect**. Examples are large volcanic eruptions or massive forest burning.

## Why is global warming a reality?

Today, the **greenhouse effect** is not the only environmental problem. Many phenomena can lead to catastrophic consequences and make people's lives on the planet simply unbearable. These include **global warming**, rapid decline in biodiversity, melting glaciers, which leads to rising ocean levels. And procrastination with measures to prevent climate change will cost the planet dearly. Right now, concern for the **environment** is forcing many countries to take tough measures, because over the past 100 years, the Earth's temperature has risen by 1 degree. This turned out to be enough for some species of animals to disappear from the face of the earth.

The causes of **global warming** have not yet been established with absolute certainty. One of them is called human activity. Instead of creating conditions for the use of the [green tariff](#), humanity burns fossil fuels, resulting in the release into the atmosphere of carbon dioxide, methane, nitric oxide, fluorinated gases. This process leads to the **greenhouse effect**, because these gases are able to absorb a lot of solar heat.

Many are concerned about the question of whether global warming can be stopped. It is possible, but it will be very expensive and will require political will. After all, to reduce the amount of harmful emissions into the atmosphere it is necessary:

- refuse to burn fossil fuels;
- revise the principles of land use, agriculture and urban planning;
- find a way to remove excess greenhouse gases from the atmosphere.

On the positive side, the cost of solar panels and [wind turbines](#) continues to decline, and many countries are gradually switching to renewable energy, which prevents the **greenhouse effect**. Of course, these measures will not stop global warming, but at least slow down.

### **Ecology: what will be the consequences of climate change**

Climatologists warn that irreversible consequences for the environment will occur if the temperature on the planet rises by more than 2 ° C. What awaits us if we can not stop the rise in temperature?

1. Natural disasters. As a result of **global warming**, climatic zones will shift, weather changes will become more drastic (severe frosts, followed by sudden thaws in winter, an increase in the number of abnormally hot summer days). The frequency and severity of anomalous phenomena (droughts, floods, typhoons, tsunamis) will also increase.
2. Lack of drinking water, famine and epidemics. This issue will especially affect underdeveloped countries in Africa, Asia and Latin America, where the **environment** is not at the highest level. In them, warming will negatively affect yields and lead to food problems. In regions with arid climates (Central Asia, the Mediterranean, South Africa, Australia) serious problems with drinking water can begin
3. Damage to fauna and flora. If **global warming** does not stop, about 30-40% of plant and animal species will disappear, as their living conditions will change faster than they can adapt to them.
4. Raising the level of the oceans. This will lead to severe and regular floods, especially in the tropics. And the glaciers of Greenland and the Arctic could wipe out Bermuda, the Maldives, and part of the Netherlands if they continue to melt at the current rate.

In addition to **ecology**, climate change will also affect sectors of the economy such as agriculture and tourism around the world. Can everyone make an impact on the

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