

# Reducing the consequences of climate change: an international and local experience

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**Abstract:** Climate change refers to long-term changes in temperature, precipitation, wind directions, and other climate parameters on the Earth's surface. This process is mainly accelerated by human activities, especially those related to industrial production, agriculture and deforestation. Several initiatives are being implemented internationally and domestically to mitigate the effects of climate change. In this article, it has been discussed about reducing the consequences of climate change: an international and local experience.

**Keywords:** Climate change, international experience, local experience, Paris agreement, Water Management, Global warming, electric cars, etc.

**Introduction:** In addition to Global warming, the problem of climate change also includes the fact that precipitation is not uniform, sometimes there is dryness, and sometimes there is an increase in precipitation at once, flooding areas. What is actually the cause of climate change?

In the 19th century, scientists discovered that certain gases retain heat from the Earth, and without their help, this heat escapes into the universe. The main role in this process is played by carbon dioxide: without it, the planet would have turned into a frozen desert. In 1896, an increase in temperature on the planet was first predicted due to an increase in greenhouse gas concentrations. Today, their number in the atmosphere has increased by 43% compared to the period before the Industrial Revolution, and the average temperature of the Earth has increased to the value predicted by scientists.

Scientists say that in the next 25-30 years the climate will get warmer and the weather conditions will become more severe. Coral reefs and other vulnerable habitats have already begun to disappear. If greenhouse gas emissions continue to spread uncontrollably into the atmosphere, scientists are afraid that this will have serious long-term consequences: these are such consequences as a

violation of World Order, large-scale migration, the acceleration of the sixth mass extinction of plants and animals in Earth's history, melting glaciers, rising sea levels and flooding most of the coastal cities of the world. The gases that pose these risks are now taking their toll, and this is an opportunity for our generation to nod about the deep moral questions that lie before us.

The Paris agreement was signed on 12 December 2015 in Paris, France, with the participation of 196 countries, and is one of the most important international agreements made to strengthen, reduce and adapt to the global fight against climate change. The agreement was developed under the United Nations Permanent Committee on Climate Change (UNFCCC) and set a number of specific goals to address global climate change. The main goal of the agreement is to prevent global average temperatures above 2°C compared to 1880. It is also argued that this increase should seek to limit it to 1.5°C. To avoid the most dangerous consequences of climate change, it is required to reduce temperature growth as much as possible.

The Paris Agreement assigns states to define and implement their own climate response strategies. Each state must submit its National Climate Action Plans (NDC - Nationally Determined Contributions) and plan

through them to implement climate protection, emissions reduction, transition to renewable energy, and other important goals. These plans must be renewed and strengthened every three years, which means that states must try to increase their contribution obligations on a regular basis. The agreement focused heavily on major areas of carbon emissions reduction, including the abandonment of fossil fuels and the development of green energy sources. The Paris Agreement, at the same time, provides for the financial and technological support necessary for developing countries to fight and adapt to climate change. As of 2020, wealthy countries have committed to providing \$ 100 billion annually to developing nations.

The settlement also plays an important role in climate adaptation activities. The Paris Agreement aims to ensure that necessary measures are taken not only to reduce emissions, but also to adapt to the consequences of climate change. This includes the development of strategies needed to prevent natural disasters, make effective use of Water Resources, combat drought, and preserve other ecosystems. In addition, the Paris agreement also indicates the need to establish monitoring and monitoring of the activities of states. Each state must show that it follows the agreement, that is, by regularly reporting how it fulfills its contribution plans. For this, a transparent monitoring system and a robust monitoring mechanism have been introduced.

Despite the fact that the Paris Agreement is an important document that unites all states to fight global climate change, there are also some problems. For example, differences between developed and developing countries and inequalities in the implementation of the agreement. While developed nations are willing to provide more financial and technological support, there are concerns that these funds are insufficient for some developing countries. Also, some countries are facing economic difficulties to fully implement their climate policy.

The U.S., however, was an important participant in the Paris Agreement and withdrew from the agreement in 2017 by a decision of President Donald Trump. But in 2021, new president Joe Biden reversed this decision and reintroduced the United States to the Paris Agreement. This, in turn, means requiring even more action to combat climate change on a global scale. However, the general conclusion is that the Paris Agreement is a document that has raised high hopes for reducing and adapting to global climate change. It is important that each state sets and implements its own contribution plans based on its circumstances and capabilities. Although there are some obstacles, this

agreement is certainly a big step in combating climate change.

Much attention is paid to the development of green energy and renewable energy in Uzbekistan. Several projects are being implemented in the country to develop sources such as solar and wind power. Within the framework of Uzbekistan's Climate Adaptation Strategy, such goals as increasing the volume of solar energy production, accelerating the transition to renewable energy sources, and increasing energy efficiency are established. Currently, the largest solar projects are being implemented in Uzbekistan. The share of renewable energy sources in the country is being increased through projects such as "Sirdarya Solar Power Plant" and "Navoi solar power plant" built in Samarkand region in 2021. According to the strategic plan of Uzbekistan, by 2030, the share of renewable energy sources in total energy production is expected to reach 25%.

Another important area that Uzbekistan is pursuing in the fight against climate change is the awareness and education of the population. The government of Uzbekistan is conducting various propaganda activities on the impact of climate change and the fight against it. The country pays great attention to providing environmental education, increasing environmental awareness of the population, involving young people in climate issues and developing scientific and Technical Research and innovation. Uzbekistan attaches great importance to strengthening international cooperation in combating climate change. The country, together with the UN, the World Bank, the European Union and other international organizations, carries out a number of projects to combat and adapt to climate change. Uzbekistan is also actively involved in global climate agreements and initiatives.

The bitter truth is that people, sometimes without realizing it, are already experiencing the consequences of climate change. For example, about 83,000 residents of New York and New Jersey were affected by sea level rise at the time of Hurricane Sandy, which scientists believe would not have occurred in a stable climate. Tens of thousands of people are already dying as a result of heat waves exacerbated by global warming. The influx of refugees destabilizes the political situation around the world — in part due to climate change. Of course, the first and most severe blow, as in other socially significant problems, is taken by the poor.

Humanity has not taken any action for a long time, so, according to scientists, now the situation is not promising. But as long as there is fossil fuel on Earth, it is still not too late to move. Atmospheric heating only comes to a potentially manageable indicator when

greenhouse gas emissions are reduced to zero. Good news: as a result of programs such as automotive fuel economy standards, serious building regulations, and emission limits for power plants, the amount of gas emissions is now decreasing in many countries. But experts are of the opinion that in order to avoid the worst consequences of climate change, it is necessary to significantly accelerate the transition to renewable energy sources.

The lowest renewable energy sources include wind turbines, solar panels, hydroelectric plants and nuclear power plants. Natural gas-fired power plants also emit less gas emissions than coal-burning ones. The transition to renewable energy sources can be costly in the short term, but in the long term, all investments are justified by compensating for climate damage and reducing air pollution-related diseases. The expansion of the renewable energy market will reduce their cost, and as a result, Clean Energy will be cheaper than "dirty" energy produced in several countries of the world.

The transition to clean energy would damage certain industries, such as coal companies, but would also create new jobs. For example, the US solar industry now employs twice as many people as the coal mining industry.

Electric cars are powered from the power grid at night and do not pollute the environment, moving around the city during the day. They are much more efficient than combustion engine vehicles and serve progress even when the electricity required for recharging comes from burning coal. Of course, electric vehicles will be invaluable only when charged with clean energy. The electrical engineering industry is developing so rapidly that some countries are discussing a ban on the sale of cars with internal combustion engines from 2030.

## CONCLUSION

The most important lesson learned in combating climate change based on international and local experiences is that in order to reduce and adapt to climate change, it is necessary to harmonize global cooperation and national policies. While international experience, such as the Paris Agreement, has provided states with cohesion in setting their commitments and implementing climate strategies, local experience includes specific measures such as developing renewable energy in countries such as Uzbekistan, water conservation, and agricultural modernization. International cooperation is particularly important in providing technological and financial assistance to developing countries. At the local level, measures such as the effective use of resources, the introduction of

innovative technologies and the increase of environmental awareness of the population play an important role in climate adaptation. However, both experiments require states to develop clear and effective policies, as well as adapt to economic and social conditions, to reduce the negative consequences of climate change.

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