

Late 20th and 21st century

The development of the world became global in many aspects: in culture, sports, business, lifestyle, economy. The latter is of special importance from the point of view of our blog, because its fundamental part is energy.

Every development, in addition to progress, also brings problems, and intensive development brings bigger problems. Thus, the intensive use of fossil fuels has led to the emission of huge amounts of greenhouse gases (<https://nevara4energy.blog/2023/10/23/climate-changes/>), especially carbon dioxide (<https://nevara4energy.blog/wp-content/uploads/2023/12/annual-co2-emission.png>). These are anthropogenic emissions. They significantly increase the amount of CO₂ in the atmosphere compared to natural emissions (https://en.wikipedia.org/wiki/Climate_change). As a result, there is an increase in the average annual temperature of the Earth's surface, which exceeded 1 °C. The latest measurements show that it is now 1.28 °C (<https://climate.nasa.gov/vital-signs/global-temperature/?intent=111>). This has further led to so-called **global warming**, which is the key cause of **climate change** on our planet, which seriously threatens many aspects of life on Earth.

The last decade of the 20th century was marked by the observation of climate change, especially through the activities of environmental movements, which persistently pointed out atmospheric pollution and the problems it brings. This period is also characterized by the fact that the amount of all types of waste increased enormously,

mainly because of the consumer fever that covered almost the entire world. Greenhouse gases are only part of it. Unfortunately, this consumer philosophy has persisted until now.

Humanity entered the **21st century** with serious intentions to fight **climate change** in an organized manner. The first international agreement in this regard was the **Kyoto Protocol** – 1997 (https://en.wikipedia.org/wiki/Kyoto_Protocol) by which industrialized countries **committed** themselves to reducing greenhouse gas emissions. This activity continued through the **Paris Agreement** (2015), which included all countries, but which was not **binding**, as well as through several other events (Madrid, Glasgow, Egypt, Dubai).

The main goal that these documents set is to limit the increase in global temperature to well below 2 °C, and ideally 1.5 °C above pre-industrial levels.

Note. The average global temperature in the pre-industrial period (1850–1900) is estimated at about 13.5–14.0 °C. Sometimes comparisons are made relative to the 1950–1975 average (14.19 °C). Please take that into consideration.

Therefore, we can say that the **contemporary energy transition** comes as an attempt by humanity to protect itself from the adverse effects of climate change. This includes various measures, the most important of which is finding energy sources that would replace fossil fuels, **especially coal**.