

# Evolution and Current State of the UN Climate Negotiations

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## Abstract

The article outlines the main stages of the evolution of climate negotiations, their key features and outcomes. In addition, the paper also outlines the specifics of the current state of negotiations. After the initial research phase, which resulted in the formation of the institutional structure of the United Nations Framework Convention on Climate Change (UNFCCC), an “experiment” was undertaken to conclude the Kyoto Protocol (KP), which implied internationally accepted targets for developed countries. It gave a lot of experience, but did not lead to a solution to the problem. At the next stage, connected with the signing of the Paris Agreement (PA), a balance of interests of developed and developing countries was found, based on climate financing of the Global South by the Global North. This activity was supplemented by national long-term goals of leading countries to achieve carbon neutrality in the second half of the 21st century. In recent years, the growing influence of the Global South and the insufficiency of funds from the North led to the adoption at the end of 2024 such financial goal of the PA for 2035, which marks the beginning of the stage of financial globalization of the PA. For the current state of negotiations, a summary has been prepared of what the UN climate negotiations are and are not about. They are based on voluntary

action by countries and are generally aimed at achieving global carbon neutrality by the end of the century leading to stabilization of warming at  $\sim 3^{\circ}\text{C}$  of the 19th century. Finance is a dominant theme and link both North and South and within the Global South. It is believed that better knowledge of the evolution and state of negotiations will help in understanding the challenges and opportunities for future action at the international level and also in adaptation of Russia to climate changes.

## Introduction

In recent decades, the issue of climate change has become an important part not only of discussions in the scientific and expert community, but also one of the key aspects of public and political debate, especially in the context of international negotiations. At the same time, the discussions themselves, both from a scientific and socio-political point of view, have undergone significant transformations: the main focus of the discussion, its goals and objectives have shifted repeatedly. Moreover, the processes of climate change themselves are global and comprehensive in nature, and the proposed measures to combat them will inevitably lead to serious changes in both the socio-economic systems of individual countries and the global economy as a whole. As a result, the specifics of international climate negotiations, their results, and consequences actually affect various spheres of public life at all levels: from individuals to entire states, which makes it particularly relevant to study the evolution and transformation of their form and content.

A significant part of the scientific literature on international climate negotiations focuses on the regulatory and legal aspect, considering the transition from one agreement to another as a process of forming a comprehensive international legal regime [Solntsev 2018; Van Asselt et al. 2022; Johansson 2023]. As a result, the international political features of the negotiation process, including the conflicting approaches of different countries and differing interpretations of fundamental concepts and approaches, remain outside the scope of these studies, despite the great importance of these aspects for climate negotiations. Legal studies are also unable to answer the key question related to the existing gap between ambitious long-term goals for curbing climate change and the relatively modest pace of decarbonization of the global economy.

It is also worth noting the relatively wide range of scientific works devoted to specific issues under discussion in climate negotiations, including the historical responsibility of developed countries [Friman and Hjerpe 2015], climate justice [Lefstad and Paavola 2024], the effectiveness of the multilateral negotiation process itself [Cléménçon 2023], and approaches to organizing international cooperation on emissions reduction [Depledge 2022]. In this case, the authors attempt to go beyond the international legal analysis of international climate agreements, taking into account the socio-political context of the negotiations themselves. However, such works focus only on specific issues, without offering a systematic and comprehensive picture of the development of climate negotiations.

However, answering the question of the discrepancy between stated goals and actual actions is impossible without studying the climate negotiation process in detail and comprehensively. A systematic analysis of the evolution of international negotiations is an important task in this context. This analysis should aim to identify the main stages, the key issues that characterized these stages, and the key results achieved. Such an analysis of the evolution of climate negotiations would allow us to draw more informed conclusions about their current state by taking into account the historical context of individual issues and the negotiating positions of various countries.

The purpose of this article is twofold: first, to analyze the evolution of climate negotiations within the UN; and second, to identify the key stages of these negotiations, their characteristics, and their results. The study will also highlight the distinctive features of the current stage of climate negotiations. The article's analysis is based on key documents and data collected by the author during his participation in international climate negotiations. Consequently, the article is divided into two parts: an analysis of the evolution of international climate negotiations and an identification of the current stage's distinctive features.

## **The evolution of climate negotiations within the UN**

### Research stage

The first stage in the evolution of climate negotiations can be called as the research stage. The key objective of negotiations during this period was to identify the scope and characteristics of climate change and the necessary actions to prevent its negative impacts on humanity. Consequently, research teams and individual scientists played a significant role in this stage of the negotiation process.

In the 1970s and 1980s, climate science underwent transformational changes and developed rapidly. Climatology evolved from a descriptive discipline into a physical and mathematical study of the atmosphere and ocean, incorporating significant contributions from chemistry and biology. The USSR was among the leaders in this field, with the A.I. Voeikov Main Geophysical Observatory (MGO) playing a crucial role. In 1972, the MGO published a monograph entitled *The Influence of Man on the Climate* [Budyko 2020]. For the first time, it became known that the impact of climate change is global in nature and requires international cooperation among scientists and society as a whole, including governments. In particular, the head of the State Committee for Hydrometeorology, polar explorer E.K. Fedorov, repeatedly stated this [Fedorov 1972].

By this time, the greenhouse effect theory had already been well-developed, and the increase in greenhouse gas (GHG) concentrations in the atmosphere—including CO<sub>2</sub>, methane, and freons—did not spark significant scientific debate. However, many aspects remained understudied, including the role of anthropogenic greenhouse gas emissions. Additionally, the ability of the ocean and terrestrial ecosystems to absorb anthropogenic CO<sub>2</sub> was not well understood (now known to be ~55%), and there were ideas about the dominant role of forests in global moisture flows (in a number of tropical regions, forests have a significant impact, but the main role belongs to oceans and cyclones [IPCC 2021]).

Moreover, at that level of climatological development, long-term predictions about warming dynamics were quite difficult to make. For example, M.I. Budyko and his colleagues predicted that an increase in CO<sub>2</sub> concentration in the atmosphere would lead to ~1.5°C of global warming by the 2020s. However, these forecasts were made without information about future energy consumption and heat release from the atmosphere. They assumed that growth in energy consumption by the 2020s would lead to an additional ~0.5°C of warming [Budyko 2020]. However, this did not occur due to the role played by the world's oceans, which absorb 91% of excess heat (land absorbs 5%, ice absorbs 3%, and ~1% remains in the atmosphere) [IPCC 2021a].

In an effort to better understand the situation, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1987–1988 [Semenov et al. 2023]. Soviet scientists, led by Y. A. Izrael, head of the State Committee for Hydrometeorology, were among the founders. In the foreword to the second volume of the IPCC's First Assessment Report, he wrote: "I am confident that the assessment and summary will provide a solid basis for future discussions and *negotiations on appropriate strategies* and actions related to climate change, which is potentially the greatest global environmental challenge facing humanity" [IPCC 1990].

Based on this, the United Nations Framework Convention on Climate Change (UNFCCC) was drafted and adopted in 1992 at the United Nations Conference on Environment and Development in Rio de Janeiro. It was quickly ratified, and the UNFCCC came into force in 1994. Nearly all countries in the world are among its participants. In addition to the UNFCCC, the UN Conference on Environment and Development also included the signing of the Convention on Biological Diversity and the Convention to Combat Desertification [UNFCCC 2025]. Together with the UNFCCC, these conventions are intended to have a synergistic effect in combating environmental challenges. The interaction between these institutions is a key topic in current climate negotiations. In 2023, for example, the secretariats of the three conventions launched a joint Rio Conventions capacity-building program, and several discussion events were held from 2024 to 2025. However, no practical steps have yet been taken [UNFCCC 2025a].

The UNFCCC formulated general principles and rules for international climate cooperation. Specifically, it set the goal of stabilizing GHG concentrations in the atmosphere at a level consistent with the "*natural adaptation capacity of natural ecosystems*" to ensure sustainable economic development, though it did not specify deadlines. Developed countries were assigned a key role and were expected to reduce their GHG emissions. Lists of countries were drawn up: Annex I to the UNFCCC includes developed countries and Annex II includes the most developed countries, which are obligated to provide financial support to developing countries. Developing countries began paying for GHG emission reports, training, and adaptation measures, but overall climate financing remained low. The structure of the UNFCCC does not allow for the revision of these lists. However, due to the rapid economic growth of countries considered developing in 1992, the question of changing the lists' composition later arose. Nevertheless, all attempts to make such changes, including giving countries the opportunity to voluntarily assign themselves to a list, have been unsuccessful thus far.

## Kyoto Protocol

The next stage in the development of climate negotiations was an attempt to reach a more detailed international agreement than the UNFCCC, which aimed to implement practical measures to combat climate change. At the first Conference of the Parties (COP) to the UNFCCC in 1995, the decision was made to prepare such an agreement.

One of the authors of this article, along with other “junior sherpas,” had the opportunity to draft the agreement. We understood that the proposed agreement was tentative and preliminary, testing the possibilities for international climate cooperation [UNFCCC 1997]. The Montreal Protocol on Substances that Deplete the Ozone Layer served as an important reference point in the development of the agreement. The Montreal Protocol sought to combat the problem through prohibitive measures, but it failed to consider the long-term nature of the problem.<sup>1</sup>

Resembling the Montreal Protocol, the text of the Kyoto Protocol (KP), developed within the framework of the UNFCCC, set internationally agreed targets for reducing greenhouse gas (GHG) emissions in developed countries without considering the long-term nature of the problem. Consequently, the KP set targets to reduce emissions by 5% from Annex I countries from 2008 to 2012 compared to 1990 levels. Each country had its own percentage, which was determined more by the current political situation than by scientific data and the need to combat climate change. Initially, the US delegation advocated for a 3-4% reduction target for its country, but after US Vice President Al Gore arrived at the negotiations, he agreed to a 7% target. Consequently, although the United States signed the KP, Congress refused to ratify it. The KP was also heavily criticized by experts and scientists, including Y. A. Izrael. Critics pointed out that the KP lacked sufficient justification and did not provide additional knowledge about climate change processes.

At the same time, the authors of the KP attempted to implement new economic mechanisms, such as international projects involving carbon credit transfers and emissions trading. However, there was almost no cross-border emissions trading because the US, which could have been the main buyer, ultimately did not participate in the KP, and the EU and Japan limited themselves to small purchases. Nevertheless, international projects provided valuable experience relevant to the current stage of action. Experience with national emissions trading and carbon regulation systems, which the Kyoto Protocol also helped develop, is useful as well.

Although the first phase of the Kyoto Protocol was formally fulfilled, primarily due to the economic downturn in countries with economies in transition, global emissions continued to grow, primarily due to leading developing economies. Even before the KP commitment period began (2008–2012), it was clear that it would not solve the problem. Thus, the Kyoto Protocol has failed to meet its objectives in practice.

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<sup>1</sup> The Montreal Protocol generated considerable controversy, often overlooking the fact that the ozone layer would take 50–100 years to recover. The 21st century has seen a steady decline in Freon-11 concentrations, and a solution to the problem is likely by mid-century [Third... 2022].

## The Paris Agreement

The failure to arrive at a practical and detailed international agreement on climate change, linked to the de facto failure of the KP, prompted the international community to seek a new format for international climate regulation. It is this search and the preparation of a new agreement that mark the next stage in the evolution of climate negotiations.

The first attempt to conclude a new agreement was made in 2009 at the COP in Copenhagen, but ended in failure. First, the essence of the new agreement had not yet been fully worked out. It was clear that internationally agreed emission commitments were impossible, and that adaptation to climate change and financial assistance to developing countries would become the main topics, but this had not yet become an “axiom.” Second, there was a diplomatic failure on the part of the US, the Danish presidency, and the EU as a whole. In the final days of the COP, they reached agreement among a small group of developed and leading developing countries, but did not take into account the positions of other states. One of the authors of this article happened to be working with representatives of the least developed countries at that COP. They were outraged when the media announced the agreement. Their strong objections emboldened a number of large developing countries that were not eager to rush into an agreement.

Developed countries were interested in reducing the impact of future global changes on themselves, which requires reducing emissions in developing countries, which by that time became the leaders in GHG growth. Developing countries, in turn, were categorically opposed to internationally agreed commitments to reduce emissions. Their interest was in obtaining funds, primarily for measures to adapt to climate change.<sup>2</sup> Moreover, it was clear that adaptation options were also limited and that not all negative impacts of change could be avoided. In this case, the most vulnerable group was precisely the least developed countries, as well as some island states that may cease to exist. In this situation, the task arose to agree on at least some outlines of an international climate agreement, as representatives of France spoke about at the COP in Paris in 2015.

As a result, it was during this COP that the Paris Agreement (PA) [UNFCCC 2015] on climate change was signed. The actions of the countries participating in the agreement on GHG emissions are referred to as their contribution to the PA, which is determined at the national level (Nationally Determined Contributions, NDC) by themselves and is not subject to external assessment in the UNFCCC [UNFCCC 2025b]. The link between the contribution and the PA goal (*to keep global warming below 2°C and pursuing efforts to limit it to 1.5°C*) is more of a slogan than actual practice. In Paris, it was clear to almost everyone that staying within these levels was unrealistic, and the wording was a concession to the most vulnerable countries and the environmental community. In the context of NDCs, the possibility of cooperation on reducing emissions was outlined in general terms: international projects and carbon trading between countries (Articles 6.4 and 6.2 of the PA), as well as non-market approaches (Article 6.8 of the PA) [UNFCCC 2025c].

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<sup>2</sup> By that time, the natural adaptation mentioned in the UNFCC text became completely insufficient.

The adaptation and finance goals in the PA were set out very briefly and in very general terms, and it took almost ten years to flesh them out in detail. At the same time, the COP decision (not the text of the PA) agreed on a figure: developed countries *would mobilize* \$100 billion per year in climate finance by 2020. It is understood that this includes not only public funds, but also other money, including private funds, raised as part of efforts to combat climate change.

For the entire ten years since the adoption of the PA, the dominant question at every COP has been how much money developed countries will provide, what it will be used for (mitigation—preventing climate change or adaptation—mitigating its consequences) and in what form (grants or loans), how the money passes through multilateral development banks, how the UNFCCC and the PA funds are replenished,<sup>3</sup> etc. Therefore, it is reasonable to call the PA a financial agreement. Initially, climate change adaptation projects received disproportionately less funding than mitigation, but then the share of funding for such projects increased to about 25%, and now tends to grow to as much as 50%. The second issue is the share of grants and concessional loans. Currently, their ratio is approximately 1:3, but there is a trend toward increasing the share of non-debt instruments.

In light of this, the voluntary nature of the norms and rules formulated within the framework of the PA takes on another meaning. In particular, from a formal point of view, all actions of countries, except for reporting, are exclusively voluntary. However, in reality, recipients of financial assistance (about 135 countries) are forced to take donor priorities into account in their national decisions in order to count on their support. In turn, mandatory donors (~40 countries listed in Annex II of the UNFCCC) need to balance their own interests with the amount of assistance they are willing to provide to other countries. In addition, about 20 countries fall outside these groups. In particular, they are already sufficiently developed and do not receive aid through UN channels, but at the same time they are not included in Annex II of the UNFCCC, i.e., they have no obligations to provide financial support to developing countries.<sup>4</sup> For them, the PA is much less significant for climate finance, while reputational and geopolitical considerations, as well as the UNFCCC's possible impacts on international trade, become more important.

Thus, the PA became a compromise solution, an attempt to sign an agreement that would suit all parties given the divergent interests of developed and developing countries. As a result, this agreement gave countries almost complete autonomy in implementing their climate policies, without imposing significant restrictions on them. As a result, the PA itself, like the KP, was also unable to become a sufficiently effective tool for reducing anthropogenic GHG emissions on its own.

## Carbon neutrality

After the COP in Paris, the question arose of synchronizing national efforts to reduce GHG emissions in a situation where the PA had actually transferred this issue to the national policy level. It took several years for the international community to reach a decision. The essence of this decision was as follows: countries announce their deadlines for achieving

<sup>3</sup> Green Climate Fund, Adaptation Fund, Loss and Damage Fund, etc.

<sup>4</sup> Chile, Republic of Korea, Russia, Saudi Arabia, Seychelles, Singapore, the UAE, Uruguay, etc.

carbon neutrality, i.e., reducing GHG emissions to a level equal to net absorption by ecosystems.<sup>5</sup> These long-term national goals are formally outside the UN system. However, consistent five-year steps of NDCs, ideally leading to their synchronization with long-term goals, are already being implemented within the framework of the PA.

The deadlines for achieving carbon neutrality were announced in 2021 during COP26 in Glasgow.<sup>6</sup> Most developed countries named 2050.<sup>7</sup> Almost all major developing countries, as well as Russia, named 2060. India named 2070, emphasizing the need for international assistance. It could be noted that the UNFCCC reporting form for submitting NDCs includes a point on its compliance with the PA emissions target. However, this is essentially a formality, and virtually all countries write “yes.” In turn, many researchers analyze countries’ plans, and the overall situation is summarized in annual UNEP reports [UNEP 2024]. The results of studies indicate that in order to keep the temperature rise within 2°C, the whole world must achieve carbon neutrality by around 2050 (counting from the second half of the 19th century, with almost 1.5°C already passed at the moment).

At present, the most likely scenario is that warming will slow to around 2.5°C by the middle of the century, followed by a relatively slow trend toward 3°C by the end of the century. An additional trend is likely due to both incomplete implementation of plans and a number of processes beyond human control, in particular the growth of CO<sub>2</sub> and methane emissions from permafrost in Canada, Russia, and the United States. The course of negotiations shows that, in general, the leading countries are calm about this prospect, as they do not consider such a level of climate change to be a serious threat requiring more urgent action. However, more vulnerable countries, especially the least developed and island developing states, regularly express their dissatisfaction with this scenario. They make strong statements at the UNFCCC because, for many of them, a temperature increase of 3°C means the realization of physical risks that will lead to socio-economic and political problems. In particular, with this level of warming, these countries will face mass emigration due to water shortages or loss of territory as sea levels rise. They are supported by environmental organizations. As a result, countries often do not publicize the actual deadlines for achieving neutrality, which is fraught with reputational costs, verbally “confirming” their commitment to the 1.5–2°C target.

## Adaptation to climate change and international climate assistance

Given that the PA framework only touches on adaptation and financial assistance in general terms, the signing of the agreement has brought to the fore the issue of agreeing on international rules and standards to regulate these areas. However, discussion on these issues only intensified after the announcement of carbon neutrality targets, which is linked to the next stage in the evolution of climate negotiations.

<sup>5</sup> This refers to GHG fluxes on managed lands, i.e., those subject to human activity, managed forests, etc. Flows that are not dependent on humans are not taken into account here, in particular, flows caused by the melting and degradation of permafrost.

<sup>6</sup> An overview of country information and energy development scenarios is provided in a special report by the International Energy Agency [IEA 2021].

<sup>7</sup> A number of countries, including Finland, Germany, Norway, Sweden, and others, have set earlier targets.

Over the past three years, countries have begun active work on the PA's adaptation goal, which were adopted at the COP in Dubai in 2023, and on finance, which was adopted at the COP in Baku in 2024, as well as on their new NDCs for 2035: all states must submit them in 2025. These issues, which are closely interrelated, boil down primarily to questions of climate finance. However, a new context has emerged at this stage: now, in the context of the UNFCCC, funds are being considered not only from the Global North, but also from the Global South, i.e., virtually all possible resources, including funds from private companies and foundations, and even revenues from global taxes and/or payments that may arise in the future [Kokorin 2025].

The PA's Global Goal on Adaptation (GGA) covers not only actions to mitigate the consequences of climate change, but above all the priorities for financing these measures in the countries of the South [UNFCCC 2025d]. An analysis of more than 150 adaptation projects implemented by UN funds with total funding of approximately \$5 billion showed that only 60% of the results can be considered sustainable, only 4% of them were rated highly, and 17% were considered unsatisfactory [UNEP 2024a]. To remedy the situation and ensure effective financing, clear project evaluation indicators are needed. However, priorities had to be identified first. This is the subject of paragraph 9 of the GGA: water scarcity is at the top of the list, followed by agriculture, health, ecosystems and infrastructure for human life, poverty reduction, and cultural heritage preservation; and paragraph 10 defines the steps to be taken by 2030: impact assessment, planning, implementation, and monitoring [UNFCCC 2024c].

At the end of 2024, the UNFCCC secretariat prepared a technical report on the transformation of adaptation, considering the terms, approaches, risks, limits, and alternatives of adaptation [UNFCCC 2024]. Active work on indicators began: it is important that all of them are linked to specific subparagraphs of paragraphs 9 and 10 of the GGA. It was decided that there would be no more than 100 parameters in total. First, all proposals (about 1,500 indicators) were collected, then the UNFCCC expert group reduced the list to 490 [Yessekina and Kokorin 2025], and then to 100, which were proposed for decision by COP 30 in Belem at the end of 2025. [UNFCCC 2025f; UNFCCC 2025g]. As a result, 59 of them were included in the COP 30 decision [UNFCCC 2025h]. The priorities for the indicators are measurability, monitorability, availability of data and baselines, outcome orientation, and long-term implications.

With regard to financing issues, it was decided in Paris in 2015 that the flow of climate finance from developed to developing countries should reach \$100 billion per year by 2020, which was achieved in 2022 [OECD 2024]. In 2024, the next step was taken with the adoption of a target for 2035 (New Collective Quantified Goal on climate finance, NCQG) [UNFCCC 2025e]. The goal is collective because, within the framework of the UNFCCC negotiation processes, there can be no talk of figures for individual countries—virtually all leading states object to this. It was necessary to come up with numerical parameters for the financial goal and involve countries that are not included in Annex 1 of the UNFCCC but de facto have sufficient resources to provide assistance.<sup>8</sup> The negotiations led to the formulation of a two-digit goal: a total

<sup>8</sup> Chile, China, Republic of Korea, Saudi Arabia, Singapore, the UAE, Uruguay, and others.

amount for the countries of the Global South and a separate part of it coming from the countries of the Global North. The decision contains a call (the UNFCCC and PA mandate does not allow for legal obligations) for “all actors” to work together and bring climate finance in developing countries from all public and private sources to \$1.3 trillion per year by 2035. “All actors” refers to government agencies, companies, and even households, including their participation in international cooperation. The amount of aid to be provided directly by the Global North countries as part of the goal was the subject of fierce debate. Developing countries insisted on a trillion dollars or more, while developed countries called for realism and a starting point of \$100 billion. Ultimately, it was decided that funding for developing countries from the Global North should reach \$300 billion per year by 2035 [UNFCCC 2025e]. Many countries expressed dissatisfaction but compromised and did not block the decision [Kokorin 2025]. The least developed and small island developing states were particularly vocal, insisting on securing 220 and 39 billion per year, respectively. They were offered various wording options (without figures) emphasizing their special needs, which ultimately made it into the decision. They were also very dissatisfied with the lack of separate funding for “loss and damage.”<sup>9</sup> These situations were considered part of adaptation, based on the fact that, although there is Article 8 of the PA (directly devoted to “loss and damage”), financial Article 9 of the PA only mentions two types of actions: mitigation—preventing climate change—and adaptation—mitigating its consequences.

In addition, other financing commitments by developed countries were also softened. In particular, other numerical requirements for developing countries were also replaced with textual formulations [Kokorin 2025]. The requirement for 50% non-debt instruments (for all sources of financing except private funds) was replaced by a call for an increase in grant resources. Moreover, without numbers, there is talk of achieving a balance between funds allocated for mitigation and adaptation. The requirement for a 20% share of climate finance allocated to multilateral climate funds, including those established by the UNFCCC (Green Climate Fund, Loss and Damage Fund, etc.), has been replaced by “at least tripling” the flow of public funds to these funds by 2030 from 2022 level. Currently, they account for only about 3% of total climate finance, but these funds are most responsive to the priorities of the most vulnerable countries [UNFCCC 2024a]. The decision did not include references to moving away from fossil fuels and to 2050 as the date for achieving net-zero emissions—a balance between emissions and absorption.

Developed countries intend to reach the \$300 billion target primarily through innovative and private funds: they have repeatedly emphasized that their public resources are limited [Kokorin 2025]. In the context of “1.3 trillion for the Global South,” the COP 29 decision refers to the creation of a roadmap, probably specifying actions until 2035, which will take more than one year. Despite all the uncertainties, a new stage of climate negotiations has begun, where all finances are being considered, not only those of the North, but of the world as a whole.

<sup>9</sup> In situations where adaptation is practically impossible, direct assistance is needed, including resettlement of people, elimination of the consequences of natural disasters, etc.

It should also be noted that the US withdrawal from the PA is not critical in the context of climate finance. The US share of public funding from the North to the Global South was only about 10% [ODI 2023], with 70% of these funds going through multilateral development banks. Their 2025 sessions showed that the US would not want to lose influence and reduce funding, but insists on excluding the word “climate” from project justifications. This does not prevent the financing of projects in related sectors, including energy. The losses should be considered to be USAID funds and money going through multilateral climate funds, but this is only about \$2.3 billion (as of 2020). The new US tariff policy could have a stronger effect, leading to a reduction in funding from other countries. Thus, it can be concluded that the losses are relatively small but highly dependent on the reaction of other countries.<sup>10</sup>

In the new context of North-South finance in 2025, all countries will need to submit their NDCs for 2035 (see the UNFCCC portal for NDCs [UNFCCC 2025b]). For developed countries, as well as those that are considered developing countries by the UNFCCC but no longer receive UN financial assistance,<sup>11</sup> NDCs are image-building in the broadest sense of the word, including the benefits of promoting their low-carbon products on the market. For recipients of financing, NDCs may consist of unconditional (actions funded by domestic resources) and conditional (with external assistance) components. A strong unconditional component demonstrates a willingness to make efforts, which attracts donors. The conditional component is an offer to donors who have their own priorities, which do not always coincide with the needs of recipient countries.

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Climate negotiations have evolved significantly over the past 40 years and have gone through a number of stages (see Table 1 on p. 67). The first stage involved discussing the scale and characteristics of the climate change problem, as well as creating the first mechanisms for international cooperation. The second stage saw an attempt to solve the problem through commitments by developed countries on GHG emissions. It quickly became clear that efforts by developing countries were needed, and that these were impossible without funding from the most developed countries. On this basis—and this became the basis for the third stage—the PA was concluded in 2015, which is extremely important for recipient countries. However, the PA has little impact on the emissions of developed countries. As a result, in 2021, outside the UNFCCC format, leading countries, both developed and developing, set their long-term national goals for achieving carbon neutrality. Five-year steps to update the NDC under the PA must be synchronized with these goals. In recent years, it has become clear that the role of the Global South is growing and that the climate funds of the North are insufficient. Therefore, in 2024, a financial goal of the PA for 2035 was adopted, which marks the beginning of a phase of financial globalization of the PA.

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<sup>10</sup> It should be noted that the US economy is developing according to its own laws, and GHG emissions have been gradually declining for 15 years, including during Donald Trump’s first term [UNFCCC 2023], and a significant change in the trend is unlikely.

<sup>11</sup> Saudi Arabia, Singapore, Republic of Korea, the UAE, etc.

**Table 1.** Stages in the evolution of climate negotiations

Stage	Main objectives of climate negotiations	Outcome of climate negotiations
Research stage, until 1997	To understand the problem and lay the foundations for cooperation	The IPCC was established and the UNFCCC was adopted as a framework for action
Kyoto Protocol phase, 1997–2015	Attempt to solve the problem through developed countries' emissions commitments	The commitment system does not work. Experience gained in carbon projects, regulation, and trading. Understanding that a new agreement can be primarily financial
Paris Agreement, since 2015	Financial agreement to help poor and vulnerable countries. Basis for a wide range of voluntary actions	Global North to South climate finance. Far from perfect, but very important for aid recipients (~135 countries). Has little impact on GHG emissions from leading countries
Carbon neutrality, since 2021.	Voluntary long-term emission goals of leading countries (outside the UNFCCC format). Achieving them with a minimum of foreign carbon credits	A benchmark for global emissions efforts (stabilizing the situation by the end of the century at ~30C). Every five years, the PA's NDCs should be synchronized with long-term goals
Finances of the North and South (actually expanding of the PA), from 2025	Globalization of the PA by means of the Global South. Financial goal of the PA for the period up to 2035	A major role of the leading countries of the Global South. Significant increase in assistance to poor states

Source: compiled by the author (based on experience of participation in the UNFCCC activities since 1994), statements by countries, and the UNFCCC documents.

## Current status of climate negotiations

The main aspects of climate negotiations described in Section 1 remain relevant to this day. Table 2 (p. 67) lists the key issues in international climate policy that are (or are not) being negotiated internationally (for more details, see reviews of the current state of negotiations [Kokorin 2025; Yessekina and Kokorin 2025]).

**Table 2.** Issues under negotiation (and not under negotiation) in the UNFCCC

Issues under negotiation in the UNFCCC	Not under negotiation at the UNFCCC	Note
Increasing the share of non-debt instruments and the share of funds for adaptation in financing the Global South. Replenishment and operating of multilateral climate funds of the UNFCCC	Achievement of carbon neutrality by specific countries (timelines, measures, etc.), their NDCs, and actions to mitigate climate changes	Financial negotiations without reference to specific countries. Discussion of NDCs only for all countries as a whole (developed/developing)
Indicators of the success of adaptation measures (within the framework of the GGA)	National plans and actions of specific countries to mitigate the consequences of climate change (adaptation)	Adaptation indicators primarily relate to international support measures
Actions to improve the detail and transparency of all countries' reporting on GHG emissions, adaptation measures, and financing	Transition to calculating emissions at the point of consumption of products, not just at the point of production	Calculation based on product consumption identifies the real responsibility for emissions and creates incentives for end users to reduce them
International cooperation with transfer of carbon units (Articles 6.2 and 6.4 of the PA) or without that (Article 6.8, non-market approaches)	Actions by specific countries on market and non-market regulation of emissions	The UNFCCC has no mandate to discuss specific countries' actions

Issues under negotiation in the UNFCCC	Not under negotiation at the UNFCCC	Note
Use of the IPCC scientific information in practical actions by countries	Physical basis and impacts of climate changes on people and nature	The physical basis of climate changes has no doubts in the UNFCCC. The extent to which IPCC emission scenarios should be taken as a basis for countries' NAPs is under discussion
Problems of unilateral trade measures and barriers	Actions of specific countries (groups of countries) on trade measures and barriers	The UNFCCC does not have a mandate to discuss specific countries, only the situation as a whole

*Source:* compiled by the authors (based on the experience of one of them participating in the UNFCCC COP in 2021–2024, as well as on the basis of documents adopted there).

The issue of climate finance and international assistance to countries of the Global South remains particularly relevant. Overall, the key contradictions and main issues described in the previous section continue to influence the dynamics and content of the negotiation process. In particular, there is discussion of expanding the share of non-debt (grant) instruments used to support projects in developing countries. In addition, part of the discussion is also devoted to the work of the UNFCCC's multilateral climate funds, including the Fund for responding to Loss and Damage launched in 2024.

Negotiations on adaptation indicators and better country reporting are also closely linked to issues of international financial assistance. In particular, prioritizing specific adaptation projects requires a relatively clear system for evaluating them, which makes negotiations in this area acute and controversial. Donor countries are also interested in improving the quality of reporting, as this will allow them to make decisions on financing projects in the Global South, supporting those that are more in line with their interests. It is significant at the same time that the issue of particular importance for the rapidly growing economies of some developing countries, as well as Russia—the calculation of emissions at the point of consumption—has not yet received sufficient attention in international negotiations.

Other issues are currently less pressing and therefore less controversial. In particular, the process of agreeing on the details of Article 6 of the Paris Agreement, which provides for the creation of a number of market and non-market mechanisms to reduce emissions, is gradually moving forward. During the COP in Baku in 2024, decisions were finalized at the CMA level<sup>12</sup> on market-based approaches to reducing emissions. These include transactions with carbon units between countries (Article 6.2 of the PA) and between legal entities implementing projects and purchasing units (Article 6.4 of the PA). In particular, the process of authorization by countries of carbon units (terms, content and format of the document, changes in authorization) intended either for transfer, for fulfilling their NDC implementation, or for other purposes was agreed upon. The document describes the specifics of the “first transfer” of units (meaning that they can subsequently be traded on the market), including reporting and the cancellation of some units to ensure the overall net effect of reducing emissions from participation in this mechanism. The document pays considerable attention to

<sup>12</sup> Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.

reporting and its uniformity, and the appendix contains requirements that include a detailed analysis of uncertainties, baselines, and risks, up to and including cases of unit revocation [UNFCCC 2024b].

It is fundamentally important that almost all countries intend to achieve neutrality within their borders, i.e., without purchasing foreign carbon units. This is evidenced by their informal statements as well as NDCs [UNFCCC 2025b]. The absence of large-scale transfers of units for global optimization of GHG emission reductions certainly makes the process of achieving neutrality more expensive and lengthy, but it is in line with countries' desire to invest only in their own territory. An analysis of their plans shows that, in a number of countries, certain legal entities will probably be able to partially or even fully fulfill their national commitments using foreign units obtained in international projects under Article 6.4 of the PA, but this will be the exception rather than the rule. Therefore, the global market under Article 6.4 will be largely voluntary and relatively small. Its advantage should be quality and greater confidence in the strict system of issuing units under the control of the PA's Article 6.4 Supervisory Body.

The decisions taken to date already allow for the launch of registries and the start of procedures leading to the transfer of carbon units. Moreover, a number of countries have announced their intention to purchase units under Article 6.2,<sup>13</sup> but these purchases are in very limited quantities and, as a rule, indicate the presence of already identified developing country sellers. Japan is the only major country that intends to purchase foreign units. Its' NDC has set ambitious targets for countries: to reduce emissions by 60% and 73% from 2013 level by 2035 and 2040, respectively [UNFCCC 2025b]. According to expert estimates, Japan could purchase approximately 3 billion tonnes of CO<sub>2</sub> equivalent in the 2030s. The purchase mechanism will primarily be the Japanese Joint Crediting Mechanism, a long-standing structure entrusted with the role of operator under Articles 6.2 and 6.4 of the PA, which actively cooperates with countries on a bilateral basis, in particular with Kazakhstan, Kyrgyzstan, and Uzbekistan [JCM 2025].

During the work of the UNFCCC Subsidiary Bodies in 2025, particular attention was paid to issues related to non-market approaches to cooperation between countries under Article 6.8 of the PA (Non Market Approach, NMA). A special platform for joint action in this area was created back in 2022, but so far only two applications have been registered (from seven African countries in 2024, as well as from Japan on the development of NMA in four Southeast Asian countries). Countries are in no hurry to submit applications and create non-market cooperation mechanisms, although more than 25 organizations have already expressed their willingness to participate and support cooperation on NMA on the platform. International negotiations on this topic are broad in nature, including a discussion of what specific formats of interaction can be considered NMA.

Science, in particular IPCC reports, at the level of the physical basis of climate change, is not discussed at the negotiations; only the use of IPCC information as a basis for NDC is controversial. Finally, the topic of unilateral trade measures has begun to be discussed at the negotiations, but without specific references to countries, as the UNFCCC mandate allows only for consideration of the situation as a whole. In addition to covering the topics

<sup>13</sup> Japan, New Zealand, Norway, Singapore, Switzerland, the UAE, , etc.

of the negotiations, it is also worth dwelling on the approaches of different countries within the negotiation process. Thus, some countries and groups of states seek to slow down the pace of decarbonisation and also to slow down actions related to reducing emissions. Among such groups are the LMDC<sup>14</sup> negotiating coalition of developing countries and the Arab Group. A key element of their position is the sovereign right to choose specific measures for implementing climate policy, as well as the formats and timing of their implementation. It should be noted that the position of these countries often coincides with that of Russia.

On the other side of these discussions are the most vulnerable countries, including the least developed and island developing states (~75 countries). They demand active measures to reduce GHG emissions and intensify efforts to allocate international aid to them to address climate issues. Developing countries are generally critical of the innovative and private sources of financing promoted by the countries of the Global North. Supported also by civil society organizations, they insist on a dominant share of public funds from the most developed countries, which should be provided on a grant basis.

As for the position of the EU and most developed countries, they generally advocate accelerating efforts to reduce emissions and other processes under the UNFCCC. In many cases, their position coincides with the proposals of the Latin American and African negotiating groups, which include countries such as Brazil and South Africa. The US, however, is unique in this regard, as its position in international climate negotiations is closely linked to domestic political dynamics. In other words, the US focuses on its domestic audience when formulating and defending its position on the UNFCCC.

## Conclusion

International climate negotiations have gone through several stages throughout their history. In particular, the first stage—the research stage—laid the scientific foundation and was marked by the signing of the UN Framework Convention on Climate Change (UNFCCC), which became the basis for further development of international cooperation on combating climate change. Almost immediately after the signing of the UNFCCC, an “experimental” attempt was made to agree on a more practical international agreement, which marked the beginning of the next period in the evolution of climate negotiations—the Kyoto Protocol phase. The new agreement proved to be largely ineffective, but it provided valuable experience and prompted the international community to recognize the need to include developing countries in the process of reducing emissions.

As a result, the search for new models led to the signing of the Paris Agreement (PA), which became the basis for the start of the third stage in the development of climate negotiations. The PA no longer set clear emission reduction targets for individual countries, essentially transferring this issue to the jurisdiction of national authorities. In addition, the PA was essentially a financial agreement, as it was international assistance

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<sup>14</sup> About 20 countries, including China, Egypt, India, Indonesia, Iran, and Saudi Arabia.

to developing countries from developed countries that became a key condition for decarbonization measures in the Global South.

The PA failed to radically reverse existing emission trajectories, prompting countries to seek other formats. The concept of carbon neutrality became such format, whose penetration into international climate negotiations became a key feature of the fourth stage in the evolution of the negotiation process. The main idea was for countries to make voluntary commitments to achieve net-zero emissions by mid-century. However, as of today, the aggregate of these commitments points to global warming stabilizing at around 3°C by the end of the century, which is an unacceptable scenario for the most vulnerable countries. This discrepancy between declared ambitions and the actual pace of decarbonization remains a central contradiction at the present stage.

Finally, the main issues of the fifth stage of climate negotiations were financial assistance to countries of the Global South and adaptation to climate change. COP 29 adopted a collective quantitative financing goal, which cemented the financial globalization of the UNFCCC, as financing must now come not only from developed countries, but also from the massive use of Global South resources. At the same time, active work is underway to develop clear indicators for assessing adaptation measures, which is crucial in the context of the assistance provided, as it allows for the evaluation of the effectiveness of the measures taken.

At the same time, discussions are continuing on Article 6 of the PA, which deals with market and non-market cooperation mechanisms. It should be noted, however, that at the current stage, the negotiations are of a rather technical nature. A characteristic feature is the lack of deep interest among most countries in large-scale purchases of foreign carbon units. This means that countries tend to achieve carbon neutrality solely through their own capabilities, which makes decarbonization processes more expensive overall.

Overall, it can be concluded that the PA slowly, imperfectly, but surely is under implementation as a financial agreement to help the most vulnerable countries. At the same time, analysis of countries' NDCs and current trajectories toward carbon neutrality indicate that, at best, the world is heading toward stabilizing global warming at 3°C by the end of the 21st century (with a corresponding set of more frequent and severe hazardous events and effects, which are predominantly negative). Therefore, it seems reasonable for Russia to use the MGO RCP8.5 scenario for planning adaptation measures, where global warming by the end of the century reaches 4–50C with the ensuing consequences for each federal district [Third... 2022] and region [Scenario... 2025]—probably giving priority to more problematic areas [Chernokulsky et.al. 2025].

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