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## Climate Changes, the Role of Economic Diplomacy and the Impact on Global Security

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#### **Abstract**

The rise in temperature and climate change is already taking on worrying proportions that seriously affect the security challenges for national security, especially the part related to economic diplomacy. The Paris Agreement currently does not provide an adequate response to reduce the consequences of climate change planned until 2030. This directly affects geopolitical stability, social insecurity and seriously threatens the world economy. As one of the responses to the threat of climate change, and thus to national and international security, the concretization of economic diplomacy as an essential aspect of national and international security is imposed. If climate change reaches the stage of an uncontrolled process, the international community could face challenges that can cause cataclysmic consequences. For this reason, climate change is becoming one of the key topics for thinking about global security.

## Keywords

climate change, global security, economic diplomacy, biosecurity

#### Introduction

Considering global climate change, economic diplomacy plays a vital role in coordinating activities between countries, all aiming to prevent global consequences on our planet. Inevitable globalization, along with certain benefits, also brings some negative effects. Concern for the preservation of the natural environment and ecosystem has been forgotten. The ecosystem was being destroyed for the needs of economic development, social progress and social welfare, and as one of the consequences, climate change developed. Climate change has influenced the adaptation of economic diplomacy to new national and global security challenges. It is essential to emphasize the cause-and-effect relationship between climate change and economic diplomacy, i.e., how climate change shaped the health of the population, the economy of underdeveloped and developed countries, flora and fauna, and causally shaped modern approaches to economic diplomacy and thus contributed to the development of new branches of economic diplomacy.

On the other hand, it is necessary to highlight the social and collective threat of climate change for every country, which poses serious challenges and difficulties for global security (Lippert,2019). Without a doubt, climate change plays an increasingly important role in defining relations in the international community. As a result, several key questions emerge. To what extent do the states want to look for solutions to existing climate problems together? How can the world economy respond to the current climate changes? What is the role of economic diplomacy in finding global (comprehensive) solutions for our planet? What tools does economic diplomacy have at its disposal to protect the system of national and global security? (Pazzanese, 2021).

It is more and more certain that the objective of the Paris Agreement to reduce warming to a limit of 1.5 degrees Celsius by 2030 shall not be sustainable. Parallel to this fact, the international community has been dealing with the refugee crisis for years, and as a result population displacement and radicalization are occurring. Rebellions of citizens against governments that pollute the environment and thus contribute to negative climate change are becoming more frequent. On the other hand, natural resources are consumed without a plan for their self-sustainability, which

inevitably leads to civil discontent and political violence, which creates a suitable ground for additional radicalization and strengthening of terrorist groups and organizations. China alone produces 30 percent of the world's carbon emissions, followed closely by the United States. We are witnessing climate change, but also global challenges for global security. The common denominator is biosecurity, which in combination with pandemic diseases, climate change, and disinformation, creates realistic assumptions for geopolitical conflicts such as Russian aggression against Ukraine. It is now evident that climate change is becoming part of geopolitics.

If we cannot or refuse to influence climate change positively, how to positively influence geopolitical challenges and threats arises. If we throw in war as a destructive human action into this combination, the result can indeed prove to be catastrophic for our planet.

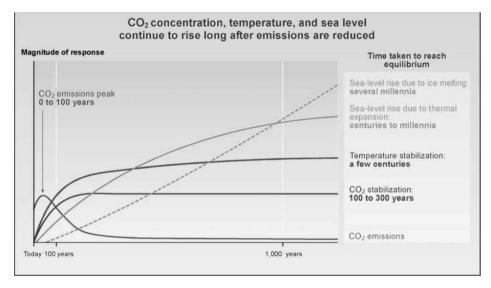
### Importance of climate changes

The professional public is divided. Some believe that climate change is mainly a natural process, because it influenced the formation of the climate in the past and continues to shape it to this day. The climate is constantly changing thanks to various factors. Sun rays, astronomical changes, various natural phenomena such as the eruption of volcanoes or geysers, the collision of tectonic plates that cause the shifting of continents, and greenhouse gases contain something in common, and that is the impact on our climate. Others believe that climate change is most commonly recognized as a term closely related to human causes and that they represent changes that are a derivative of human activity on the Earth's surface. The need for progress and the desire to simplify the way of life of future generations led an individual to reform the climate in a negative sense and thus to an existential question. The best-known example of the contemporary problem of climate change is global warming, which has led to the melting of large areas of ice and the rise of water levels, which is regarded a product of human activities due to the increased emission of greenhouse gases. Global warming constantly leads to climate change in the form of increased temperature, which facilitates the transmission of various infectious diseases, but also leads to various changes

in flora and fauna and the possibility of complete extinction of certain plant and animal species. The necessary link with the environment has been forgotten and has been systematically destroyed, thus worsening the living conditions. Even during the Ice Age, man had to adapt to a certain climatic condition and accordingly find a way to survive. Millennia passed and man adapted to a different climate. Meteorological education of individuals soon began, so recurring climate patterns were noticed that were additionally linked to certain geographical areas, and through comparison and analysis, significant sudden climate changes were observed, and man had to face the concept of climate change. The climate is not static but changeable, and climate changes should be distinguished from variations within a certain climate period (Branković, 2013-2014). Climatic variations are associated with changes within a short period of time, for example within a period of one year, while according to Branković, climate change is defined as "a significant and permanent change in the statistical distribution of climatic elements (or weather phenomena), usually over a period of several decades up to million years" (Branković, 2013-2014). Climate changes occur under the influence of the joint action of nature and man. Nature affects climate change through natural phenomena such as the action of the sun, astronomical factors, volcanic eruptions and the movement of tectonic plates, while human action affects it through deforestation, the consumption of fossil fuels, increasing the emission of carbon dioxide and other harmful gases into the atmosphere and increasing aerosols in the air (MacKibben, 2005). Human activities have a harmful effect on the climate because they lead to climate changes such as global warming, strengthening the greenhouse effect and contribute to the creation of damage to the ozone layer. Human activity has greatly damaged the chemical composition of the air and thus worsened the balance of the climate system (Zaninović, Gajić Čapka,2008). According to Zaninović and Gajić-Čapka, "numerous physical and biological indicators of climate change have been observed, such as an increase in mean sea level, duration of ice on rivers and lakes, melting of non-polar glaciers, reduction of snow cover and frozen ground, shifting of the snow line, changes in seasons and the vegetation period, and thus also in the phenological phases (beginning of flowering of plants, beginning of yellowing of leaves, falling of leaves), shifting of the boundaries of certain plant and animal

species, changes in reproduction and flowering, and the bleaching of coral reefs in the Pacific" (Zaninović, Gajić-Čapka,2008). Due to human activity on the Earth's surface, the air temperature has risen sharply in the last hundred years and scientists' predictions are that it will not decrease, but that there will continue to be an increase.

Sluggishness of the climate system



Source: K.Zaninović, 2008.

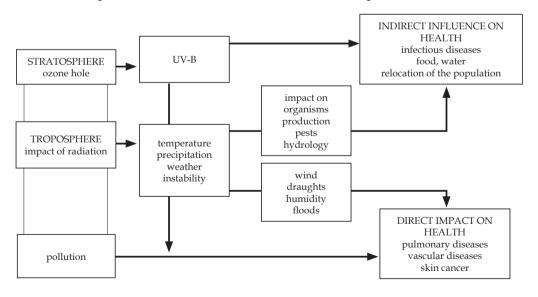
## Climate change modeling and impact on global security

In order to be able to statistically process data and make future predictions about the course of climate change, it is necessary to understand the concept of climate models and climate change modeling. The climate model calculates the quantitative state of climate elements obtained by the interaction of the components of the climate system (Branković,2013-2014). The types of climate models differ from simple ones in which the energy balance of a closed system is calculated, which is based on energy flows (heat, humidity), to very complex models of the general circulation of the atmosphere. The

general circulation model of the atmosphere combines the ocean circulation model, the ice sheet model, the soil process model, the vegetation model, and many others, and may also include various chemical processes within the components of the climate system on Earth, which are considered to be a global climate model. Unlike global climate models, regional climate models cover a smaller area, i.e., a continent or a region, and enable more detailed calculations of climate elements. Specifying the global or regional climate through climate models is impossible without taking into account the past time period for which there are measured climate data and then the climate model simulates the real climate. Validation of the model, i.e. comparing the simulated climate with the real one, proves the degree of confidence in the climate model. By studying climate models, it was determined that climate changes in the last fifty years are the result of solely the influence of human activity. Climate change modeling makes assumptions about future emissions of greenhouse gases, which depend on the socioeconomic level of human development, the number of inhabitants on Earth, energy production and consumption, urbanization, the size and utilization of arable land, the use of water resources, plant cover, traffic, etc. (Branković,2013-2014) Climate change affects the quality of life of every individual. They lead to numerous consequences and potential risks, such as the deterioration of the population's health or the creation of impossible conditions for life on Earth. Various studies prove that increased temperatures in multiple areas of the Earth's surface have laid a good foundation for the development of infections and increased mortality. Climate change also brings an increase in numerous costs. Due to the increased temperature, the costs and consumption of electricity for cooling also increase. Long periods of increased temperatures can result in droughts that reduce food production potential and cause dangerous forest fires. Climate change dramatically affects the population's health, the economy, and the flora and fauna, both regionally and globally. According to Zaninović and Gajić-Čapka, "climate changes affect people's health, the most prominent of which is increased mortality due to heat waves, the frequency of which also increases with global warming" (Zaninović, Gajić-Čapka,2008). Human activity has led to changes in the chemical composition of the air, which has led to changes in the climate system. Therefore, climate change

affects the health of individuals directly and indirectly. They have a direct impact through metamorphic diseases such as asthma, vascular diseases, skin cancer or rheumatism, and indirectly through the transmission of infectious diseases, the availability of drinking water, and the impact on food production. These are vital facts in assessing the effects of climate change on the threat to global security (Campbell, Parthemore, 2016). Changes in optimal climatic conditions can significantly modify the properties of the transmission of disease and can also increase the spatial distribution of disease vectors, such as ticks, and extend the seasons of allergic diseases. Extreme weather events such as floods or tornadoes can result in physical injury and destruction of critical infrastructure. Climate changes can lead to the creation of resistance, that is, a change in the sensitivity of certain diseases, which is why the spread of malaria in Africa to higher altitudes (highland malaria) has been observed. Abrupt changes in temperature affect the growth and durability of water-borne infections, and abnormal amounts of precipitation can contaminate water.

Schematic representation of the influence of the atmosphere on ma



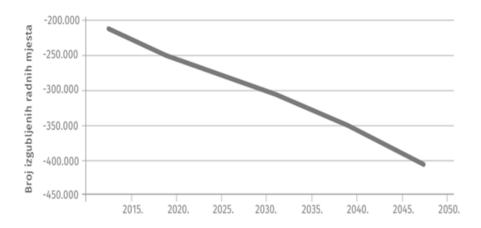
Source: K.Zaninović, 2008.

Global warming has brought with it heat waves which have proved to be fatal and which research proves that of all extreme meteorological events such as tornadoes, floods and storms, they still take the highest number of deaths. In Europe, the heat wave in 2003 killed more than 21 thousand people. Heat waves have a substantial impact on the health of individuals because if they are of a vigorous intensity and of a long-lasting nature, they significantly increase the risk of death. The risk of death during a heat wave increases drastically in the elderly due to reduced sweating capacity. Most often, a heat wave in older individuals causes cardiovascular diseases, respiratory system diseases or heat stroke. Newborns and children in general, are at greater risk due to limited thermoregulatory possibilities and dehydration. Furthermore, according to research, following older individuals and the youngest, women, manual workers and generally residents of dense urban areas are at greater risk of heat stroke. Climate change due to ozone depletion has also contributed to stronger UV radiation, significantly increasing skin cancer risk. Exposure to UV rays has a harmful effect on an individual's health because the possibility of skin damage such as burns or skin cancer increases drastically, various eye irregularities such as cataracts or snow blindness and various changes in the immune system can occur. Research proves that in the last twenty years, due to the weakened ozone layer caused by human activity, which as a result enables greater atmospheric permeability of harmful UV rays and by increasing the length of exposure to the Sun and thus to UV rays, the number of people suffering from skin cancer has increased significantly. In addition to skin cancer, harmful UV rays are also associated with various damages to the cornea, retina and lens of the eye, such as cataracts, which reduce and damage vision and can lead to permanent blindness. Absorption of harmful UV radiation leads to the weakening of immunity. The skin is the first pillar of the barrier against infections, and when it is damaged, the body's immune response to foreign substances is automatically weakened. Exposure to UV rays can cause various infectious, parasitic, bacteriological and fungal diseases and, in the last case, inflammatory changes in the stomach, because the basal metabolism decreases and the secretion of gastric acid increases (Premec,2000-2001). So, these are all issues for wider global security., because its primary task is the protection of the world's population.

### Impact on global economy

Climate change affects the economy of all countries. The need to adapt workplaces due to new weather conditions, the costs of damages from extreme weather conditions, high financial expenses for cooling the space and the reduction of the number of workplaces due to high temperatures represent a major economic issue. For example, according to the Report of the European Parliament and the Council on the implementation of the EU strategy on adaptation to climate change, the annual costs of flood damage in the European Union could increase from 4.5 billion euros to 23 billion euros over the next thirty years. (European Commission, 2018). High temperatures make work impossible, especially outdoors, and lead to shorter working hours due to heat stress. According to various scientific studies, climate change will affect the decline of GDP over a certain period due to a decrease in labor productivity, but also due to an increasing number of floods that will, among other things, change the current trade flows and damage numerous coastal areas. Due to climate change, many jobs will have to be abolished because it will only be possible to work if certain adjustments are made. For example, droughts due to high temperatures and the increased risk of heatstroke will have negative consequences on particular economic sectors and thus on the economy of a specific country as a whole.

The total number of jobs lost in the European Union due to climate change in the period from 2015 to 2050.



Source: Triple E, 2020.

The optimal working conditions are at a temperature of 16°C to 24°C, and with the increase in temperature due to climate change, employees are exposed to numerous health problems, their productivity is reduced and their risk of fatigue increases, which can result in various injuries at work. The most at-risk group is made up of workers who do physical work outdoors, such as masons and highway builders. Furthermore, climate change strongly affects the economic sectors of agriculture, forestry, fishing, energy and water supply, transport and tourism, construction, health, emergency and rescue services, banks and insurance, public services, production and industry. Agriculture is highly dependent on climate change, as sudden temperature differences, extreme weather conditions and rainfall affect the productivity and distribution of crops. Forestry is sensitive to climate change as it results in complex and slow adaptation of trees to new conditions, forest fires, damage from storms that affect the productivity of wood industries, increased levels of carbon dioxide that damage trees and an increase in the number of plant pests (Scharmer, Kaufer, 2016). Climate change affects fisheries, i.e., the relocation of fish stocks and the reduction or increase of certain species through rising sea levels, ocean acidification, and changes in water temperature and precipitation. Tourism is directly connected to climate change in such a way that high temperatures make it

impossible to enjoy a pleasant stay in the sunniest parts of the country that are attractive to tourists, rising sea levels threaten tourist infrastructure in coastal areas, cultural and natural heritage are becoming more and more endangered, winter tourism will last less because in the future, the snow cover will be thinner and melt faster. Climate change affects infrastructure and construction in such a way that buildings become unstable due to locations subject to floods or avalanches, through design that is not adapted to extreme weather conditions, resulting in damage and collapse, and through risks to the health and safety of construction workers. Due to climate change, emergency services and other public services, such as fire and rescue services are increasingly overburdened with work, and employees are increasingly at risk for their own safety and mental and physical health. Healthcare costs are very high and there is an overload of the healthcare system, which affects the country's economy as a whole. Climate change has a significant impact on the energy sector through changes in the average and variability of wind, solar and hydropower sources, the availability of crops as raw materials for bioenergy, the costs and availability of fossil fuels due to the melting of sea ice and permafrost, the efficiency of photovoltaic panels, thermal power plants and power lines due to ever-higher temperatures, suspension of technologies due to changes in the frequency and intensity of extreme weather events (Hamilton, 2018). Banking and insurance is affected by climate change, which manifests itself in large financial losses due to damage to infrastructure, land and property.

In the long run, the impact of climate change on the economy of countries leads to a decrease in the population's quality of life and higher costs that can put the economy of a certain country in a very unfavorable situation, thus reflecting on the global economic scene.

## Impact of climate change and the role of economic diplomacy

In order to define and explain diplomatic science, numerous scientists, philosophers, and politicians often connected diplomacy with the economy. The art of negotiation, which dates back to the very beginning of the creation of nations and even certain forms of states, was closely related to

the trade relations of the time, which date back to 2500 BC. With the onset of globalization, diplomacy and the economy have merged even more into a single unit, which is known today as economic diplomacy. The concept of economic diplomacy, its complexity and importance is deeply connected with the external and internal policy of every country in the modern era. Today, this term is used more and more often, and it will definitely mark the near future. Economic, more specific trade relations were considered peripheral in diplomatic activities until recently (Žirovčić,2016). That is why trade attachés were in a subordinate position compared to other diplomatic representatives. Nevertheless, greater cooperation between countries, market liberalization and strong competition encouraged the development of activities related to economic growth, exports and investments (Žirovčić,2016). There is an increasing connection between diplomats and the economy, through involvement in activities related to increasing competitiveness on the international market, but also the opposite. Economy and diplomacy are slowly merging, and economic diplomacy is recognized for the first time as a unique entity and becomes an essential factor in the conduct of national politics.

Economic diplomacy is an instrument of foreign policy in the economic relations of international entities. Therefore, economic diplomacy implies diplomatic activities to support the financial and business sectors of the home country (Žirovčić, 2016). In short, it represents the use of all diplomatic and economic activities to protect national interests. The aforementioned activities can also be viewed within the framework of economic and commercial diplomacy. Economic diplomacy deals with issues of economic policy, for example, negotiations regarding international trade standards within the World Trade Organization (WTO) or some other international organization in the field of determining economic standards (Moons, Van Bergejik, 2009). Furthermore, economic diplomacy uses economic resources as punishment or reward to achieve the national interest. On the other hand, commercial diplomacy represents the activities of diplomatic and consular missions that help the financial and business sectors of one's own country to achieve economic success according to the country's development goals (Plevnik, Mesić, 2011). This activity includes the promotion of trade relations

and foreign investments. Trade promotion focuses on increasing exports to existing markets and finding new markets. Encouraging foreign direct investment abroad is carried out through lobbying by diplomatic missions, and in the home country, certain agencies are usually in charge of this with the goal of attracting investments, where activities related to foreign investments are carried out by employees of ministries and specialized agencies. Cooperation in science and technology with the inclusion of research and development sets as the main activities the improvement of the technical capacity of the business sector and competitiveness on the international market, which is mainly handled by the Ministry of Science. The promotion of tourism is crucial due to the possibility of foreign investments and balancing the balance of payments, and it is dealt with abroad by diplomatic missions that have promotional materials, while within the country it is dealt with by tourist boards and the Ministry of Tourism. Advocacy of the interests of the national business community is carried out by non-governmental organizations such as trade unions, other civil organizations, chambers of commerce, and in certain countries this is done by special commissions within some other state bodies or ministries whose main goal is to strengthen and advocate the business sector (Bazdan, 2011). The complexity of defining the very concept of economic diplomacy indicates the long-term interweaving of the economy of a certain country and diplomacy, that is, the art of diplomatic negotiation. All of these factors confirm the creation and strengthening of the concept of economic diplomacy over a certain period of time, which is due to changes in certain state policies under the pressure of various circumstances from the very beginning until the modern era, and which is due to the new needs of society that are connected to today's times.

Climate change affects the economy of developed and underdeveloped countries around the world. Scientific research indicates that climate change has affected all economic sectors. Climate change is a problem for the economy of countries because it increases the risk of loss and damage to assets, increases the costs of infrastructure and services, and threatens national financial stability. Due to its great impact on the economy, climate change also affects the economic diplomacy of each country. Economic diplomacy's main goal is to protect national interests through diplomatic and economic

activities, and climate change affects its design, implementation and results. Extreme weather conditions as a result of greenhouse gas emissions pose a serious threat to global security and the economic picture of every country. Severe weather conditions have caused the economic development of certain countries to stagnate and the appearance of certain territories to change, resulting in the potential emergence of armed conflicts. The above represents a challenge to economic diplomacy, whose experts in multilateral negotiations must approach with a great deal of caution so that disputes do not escalate. Claims for energy resources located under frozen surfaces that have begun to melt due to climate change is one of the challenges faced by economic diplomacy in modern times, thus becoming a vital issue of global security. Economic diplomacy is a powerful means of securing national interests. The modern era has brought numerous advantages but also obstacles in the practice of economic diplomacy. New situations such as climate change have influenced the economic development of countries, but also the dynamics of multilateral negotiations of an economic nature. Due to globalization, the preservation of the environment has been forgotten. The ecosystem was being destroyed according to the needs of the development and progress of society, and as a consequence climate changes developed. Negotiations aimed at achieving favorable trade relations, preserving national interests and promoting exports and investments create a favorable environment for the development of the economy of each country. However, climate change has significantly slowed down countries' economic development and thus affected economic diplomacy activities. Climate change has greatly influenced the development and creation of modern economic diplomacy. Many relations between countries have become strained due to climate change. A well-known case is the Arctic region, which began to melt due to climate change and led to claims on the said territory by a large number of countries, because the Arctic region is not regulated by international law (Andrassy, Bakotić, Seršić, Vukas, 2010).

## Climate change and the threat to global security - Example of the arctic

The Arctic, as the northernmost point on the Earth's surface, represents an interesting landscape because of its energy wealth and the enormous amount of drinking water it possesses, but also because of the climate changes that affect it and which concern the international community. Due to the deficit of international law, certain tensions arise between states where each state claims certain rights to that territory. The Arctic region poses a threat to biosecurity and the possibility of conflict escalation, both conventional and environmental (Scott, Czub, Dai, 2014).

Many researches and studies about this huge ice sheet, which covers one sixth of the Earth's surface, point to the fact that a quarter of the world's oil and gas reserves are located under the arctic ice and the sea, more precisely at depths of up to 500 meters. The resource potential of hydrocarbons in the Arctic is estimated at 106 billion tons of oil equivalent, i.e., 15 percent of the world's oil reserves and about 30 percent of natural gas reserves. The Arctic is also rich in mineral resources such as: bauxite, nickel, copper, uranium, phosphate, cobalt, ten million tons of zinc and lead carbonate, and even three billion tons of magnesium carbonate. The Arctic is also enriched with large quantities of coal, platinum, diamonds, tin, and gold, and the total value of this mineral wealth is estimated between a dizzying 1.5 and 2 trillion US dollars. In addition to energy and mineral resources, the frozen blanket also hides an abundance of amber and fossil ivory, and the Arctic Sea provides about 10 percent of the world's fish catch and fresh drinking water. The melting of the entire Arctic blanket, or even a more prominent part, would make the northernmost part of the Earth a new maritime traffic center, and an important strategic and military-political area, which leads to increasing tensions among sub-Arctic states and attempts to claim certain rights to these passages. The loudest is Canada, which firmly advocates the right over the Northwest Passage and therefore wants to regulate that passage according to its own wishes, while the United States of America, on the other hand, claims that it is international waters that everyone can use freely for the purpose of maritime traffic. Those sea passages also increased

the interest of China, which bases its economy on exports, thus 50 percent of its GDP depends on maritime transfer, and the fact of the possibility of shortening the route from Shanghai to Hamburg by 6,000 kilometers via the Arctic passages also increased its interest in by claiming certain rights in that area, citing the same arguments of unhindered passage as the United States of America. Tensions between the states will constantly increase with greater navigability in the future of the Northwest Passage, and the issue of that passage is has certainly not been concluded, while on the other hand, the Northeast Passage is not so controversial just because of the fact that Russia stretches along its entire length (Degan,1994). Disputed and unregulated sea lanes of the Arctic are not the only subject of disagreement between a dozen countries. The increasing need for new sources of natural gas and oil, due to the already almost used or completely exhausted other deposits in the world, turned the subarctic countries against each other.

The Lomonosov Ridge is a leading area of contention because ownership of it would mean control of a large part of the Arctic and all the riches found there. This undersea mountain range connects the continent of North America with the continent of Eurasia, so Russia and Denmark found themselves at opposite ends of the "ring", where Russia on the one hand claims that the ridge is a continuation of Asia, and Denmark considers it to be an extension of Greenland. The dispute also led to certain provocations, such as a stronger emphasis on Russia's desire to conquer that ridge, when the expedition led by Artur Čilingarov in 2007 had the primary goal of proving the connection of the Lomonosov Ridge with the Novosibirsk Islands, 1,800 kilometers away (Jozić,2011), and this proof resulted in by placing the Russian flag on 4,261 meters of the seabed of the Arctic via the MIR-1 and MIR-2 bathyscaphes, which caused great indignation from other countries and condemnation of Russia, which wants to symbolically appropriate that territory.

Quite unexpectedly, China joined the territorial claim, whose interest began in 1995. Although it has no possessions of its own in that part of the world, China sees itself as an almost Arctic country and wants the parts of the Arctic that have not yet been appropriated to be declared an international good, the heritage of all humanity. By doing so, China allocates large sums of money to mining in the area, thereby helping to finance it, and has also offered

lucrative trade contracts to Sweden, Iceland and Denmark, and in return has observer status in the Arctic Council and exclusive rights to exploit Greenland's natural resources. , a relatively undeveloped and poor island with its own administration, but under the authority of the Danish crown. Such an economic policy of China provoked sharp criticism and a reaction from the European Union, which, like the United States of America, increased its presence and interest in the region. The European Union therefore offered financial assistance in the amount of several hundred million so that exclusive rights would not be manifested only by China.

A part of this indigenous population is made up of the Inuit, who, due to their long life in the Arctic, also believe that they can lay claim to certain parts of that area, which is due to the belief that they are the only ones who can decide on it due to the past incorporated deep into their culture and identity, which is due to the opinion that the interference of great powers in that area and changing the ecological picture will greatly threaten the security of their community. In addition to the claims of the countries and population of the Arctic region for a certain part of the territory or at least some kind of exclusive right in the Arctic, the right to certain parts of the territory is also claimed by countries that do not have a direct territorial connection with the Arctic area, and Japan and the Republic of Korea received their observer status within the Arctic Council. According to international law, the Arctic does not belong to anyone and no country, not even those that somehow border it, own it. The only international treaty that regulates this area is the United Nations Convention on the Law of the Sea (UNCLOS,1994), and the issue of borders at sea is governed by Article 57, which reads: "a coastal state may determine its exclusive economic zone up to a distance of 200 miles from starting lines from which the width of the territorial sea is measured". Conventional war in the Arctic area is ruled out due to the difficult accessibility of the area and the climate itself. But we are witnessing investments in some countries' military potential, especially considering the air space. Thus, Russia is building eight nuclear submarines of the "Borei" class, which will be intended exclusively for the Arctic region (Campbell, Parthemore, 2016). Canada is investing one billion dollars in the purchase of unmanned aerial vehicles with a weapon system that will patrol the north. Denmark has the "Thule" air base via

Greenland, and the United States has ground, air and naval forces stationed in Alaska. Although the states are not inclined to go to war in that area, due to the increasingly rapid melting of the ice and oil exploitation, which increase the possibility of an ecological disaster and to protect the flora and fauna of the Arctic itself, ecologists are increasingly vocal in their warnings of unfathomable environmental consequences in the event of any conflicts. The Arctic thus embodies the future of all humanity, not only because of natural resources and drinking water, but also because of the potential problem of melting glaciers and rising sea levels (Flannery, 2007).

#### Conclusion

Climate change has changed the development of economic policies at both national and international levels. The usual pattern of economic operations has changed its course to claim resources that have become more available for exploitation in remote and untouched territories. The rapidly growing territorial disputes, environmental disputes and conflicts between indigenous populations and urban developed countries are not abating. The possibility of escalation of armed conflicts or environmental ones is growing more and more. Most of the consequences of climate change are experienced by underdeveloped countries that have had the least impact on pollution and the occurrence of climate change.

A quality diplomatic service that protects national interests through economic diplomacy strategies can contribute to economic growth at the national level, but it is also essential to apply climate diplomacy strategies. To preserve life on Earth in the future and protect the population, it is necessary to negotiate internationally in a way that takes into account both national interests and ecological guidelines aimed at preserving and restoring the ecosystem. Good education of the diplomatic service on climate change is necessary so that all diplomatic protocols can be carried out smoothly and to prevent further damage that can lead to fatal consequences at the international level. The exploitation of natural resources for economic purposes, among other things, has caused numerous climate changes. They represent a significant challenge for global politics and have become one of the burning issues that

the diplomatic service deals with. The UN General Assembly and the UN Security Council concluded that uncontrolled climate change poses a threat to international peace and security. Water scarcity and generally extreme climatic conditions cause migration and encourage the potential emergence of numerous armed conflicts over territory, and this represents a severe threat to global security. Furthermore, the UN Framework Convention on Climate Change (UNFCCC) concluded that it is necessary to limit the increase in global temperature to 2°C. Achieving such a goal is possible only with the creation of a certain international regime that requires the engagement of all countries in implementing the instructions given by the UNFCCC and international cooperation through formal and informal institutions and the implementation of strong national programs related to climate change. Climate change affects both developed and underdeveloped countries equally, so the UNFCCC represents the international cooperation of all countries that are equally represented and have the same right to vote, regardless of the level of development.

The 2015 Paris Agreement represents a success of climate diplomacy as it was ratified by states, committing states to accelerate action and investment in a sustainable low-carbon future. The United Nations Climate Change Conference in Glasgow in 2021 achieved an increase in funding for developing countries to combat climate change, the initiation of a global commitment to reduce methane emissions and the completion of the Paris Regulation. With the increasing impact of climate change on the population and the economy, the way has been created for the development of climate diplomacy as one of the newest and most relevant branches of economic diplomacy. The term climate diplomacy began to be used recently, and many experts interpret the definition of the term in several ways. A group of many definitions of climate diplomacy emphasizes that the main goal of climate diplomacy is the prevention of dangerous climate changes that harm the population and the economy. Climate diplomacy, its innovation and development are shaped precisely by climate change. The greatest challenge to climate diplomacy is the creation of synergy between the satisfaction of the national interests of states and the achievement of international cooperation, without which it is impossible to achieve the goals that will ultimately result in an

improved climate picture. Large financial investments to combat climate change represent an obstacle in the future that requires good preparation of climate diplomacy at the national level as well, not only at the global level (Randers, 2014).

Following on from the above, certain recommendations are imposed in order to make the unfavorable trends of climate change reflect as little as possible on global security while making maximum use of the available resources of economic diplomacy.

#### Recommendation 1.

In solving complex climate problems, it is necessary to ensure a comprehensive approach, but also the consequences of climate change on global security, especially when it comes to the available resources of states, whereby economic diplomacy occupies an important place in coordinating measures at the global level.

#### Recommendation 2.

To ensure the synergy of economic and climate diplomacy as a basis for defining the elements of global security when dealing with the problem of climate change and adverse effects on the well-being of the population, infrastructure and natural resources.

#### Recommendation 3.

In order to obtain the best results related to climate change, it would be useful to have a quality strategy of economic (climate) diplomacy, which suggests the cooperation of diplomatic, economic and security services at the national and international level.

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# Klimatske promjene, uloga gospodarske diplomacije i utjecaj na globalnu sigurnost

#### Sažetak

Porast temperature i klimatske promjene u cjelini već danas poprimaju zabrinjavajuće razmjere, koji nose ozbiljne izazove za globalnu sigurnost, posebno dio koji se odnosi na gospodarsku diplomaciju. Pariški dogovor zasad ne daje primjeren odgovor u cilju smanjenja posljedica klimatskih promjena, planiranog do 2030. godine. Time se na izravan način negativno utječe na geopolitičku stabilnost i socijalnu nesigurnost te ozbiljno ugrožava svjetsko gospodarstvo. Kao jedan od odgovora na opasnost od klimatskih promjena, a time i za nacionalnu i globalnu sigurnost, nameće se konkretizacija djelovanja gospodarske diplomacije kao važnog aspekta nacionalne i globalne sigurnosti. Dođu li klimatske promjene u fazu nekontroliranog procesa, međunarodna zajednica mogla bi se suočiti s izazovima koji mogu prouzročiti kataklizmičke posljedice. Zbog te činjenice, klimatske promjene postaju jednom od ključnih tema za promišljanje globalne sigurnosti.

## Ključne riječi

klimatske promjene, globalna sigurnost, gospodarska diplomacija, biosigurnost