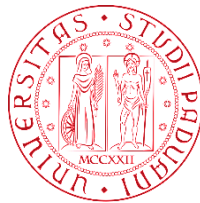


**UNIVERSITÀ DEGLI STUDI DI PADOVA**

DEPARTMENT OF POLITICAL  
SCIENCE, LAW, AND  
INTERNATIONAL STUDIES

**Master's degree in  
Human Rights and Multi-level Governance**



**THE CLIMATE CHANGE AND SECURITY IN THE EUROPEAN UNION:  
EXAMINING THE CHALLENGES AND OPPORTUNITIES**

*Supervisor:* Prof. PENNICINO SARA

*Candidate:* ZEHRA IREM AKDENIZ

Matriculation No.: 2015722

A.Y. 2022/2023



## Contents

ABSTRACT .....	v
INTRODUCTION .....	1
1. CLIMATE CHANGE .....	5
1.1. Causes of Climate Change .....	7
1.2. Consequences of Climate Change on Human Rights .....	10
1.3. Impacts of Climate Change on the Environment .....	14
1.4. International Environmental Politics .....	18
2. SECURITY .....	28
2.1. Types of Security .....	30
2.2. Environmental Security in the EU .....	39
2.3. Human Security in the EU .....	43
2.4. The Intersection of Environmental Security and Human Rights in the EU .....	49
3. EU POLICIES .....	54
3.1. EU Policy Framework on Climate Change .....	55
3.2. EU Policy Instruments for Addressing Climate Change .....	60
3.3. EU Policy Responses to Climate-induced Security Challenges .....	64
4. CASE STUDIES .....	71
4.1. Urgenda Foundation v. State of the Netherlands Case Study and Discussion .....	71
4.2. Agostinho and Others v Portugal and 32 Other States Case Study and Discussion .....	76
CONCLUSION .....	82
BIBLIOGRAPHY .....	86



## ABSTRACT

One of the main problems of humanity is currently experiencing is climate change. The threat posed by climate change is well acknowledged. Although it has been discovered that research on the security implications of climate change has a significant impact on policymaking, experts have not come to a consensus regarding the relationship between climate change and human security, leaving the climate-security nexus and corresponding policies in need of development (Martinez, 2020). Another development was the framing of climate change as a security concern. As Brown and Crowd have stated, we are beginning to realize the speed and extent of climate change, and the way it threatens this rapid change. It will undermine the economic and political stability of much of the World in the coming years. Problems such as where we will find water, where we can live, and where we can grow food will be the biggest reason for this undermining.

The purpose of this study is to analyze how the European Union addresses the security challenges related to climate change, and how those actions impact the environment and human security. The qualitative methodology will be used for this study. Analyzing case studies and doing literature reviews are both components of the qualitative approach. The literature review will be compiled and examined the current studies, reports, and policy documents on climate change, security, and EU policies. There will be two case studies to focus this study, *Agostinho and Others v Portugal and 32 Other States* case study and *Urgenda Foundation v. State of the Netherlands* case for the case study. In order to better understand the instances, It will be collected and evaluated both primary and secondary materials, such as court records, policy documents, articles, and other research. This analysis will explain how the EU has handled the security issues brought on by climate change as well as how EU policies have affected human security and environmental security.

## INTRODUCTION

Climate change is a major global issue that is expected to have widespread effects on various aspects of human life. According to the definition set out in Article 2 of the 1992 United Nations Framework Convention on Climate Change, one of the international agreements addressing this issue, climate change refers to changes in the climate that are directly or indirectly attributable to human activities (United Nations, 1992). These activities contribute to changes in the composition of the atmosphere. Although the concept of climate change was only formulated in the 20th century, scientists, environmentalists, and academics suspect that the World's climate has undergone a visible transformation over the last century. The Intergovernmental Panel on Climate Change predicts an increase in extreme weather and climate events in the 21st century, including heat waves, heavy rainfall, and rising sea levels (AR5 Climate Change 2013: The Physical Science Basis — IPCC, 2013).

Human activities play a major role in the negative impacts of climate change. Due to the ever-increasing energy needs and consumption habits of humanity, human beings have started to damage the biological and geological structure of the earth. This impact, which started especially with the Industrial Revolution, has increased rapidly. According to research, the damage to the earth caused by human activities and the changing gas balances in the atmosphere is equivalent to the damage caused by a meteorite impact or volcano eruptions (Kurnaz, 2019).

Human impact continues to increase exponentially, with increased energy use, population growth, and an increase in CO<sub>2</sub> in the atmosphere. With the impact of this situation on climate change and the consequences of environmental degradation causing security threats, the concept of environmental security has begun to be addressed on a global scale. Especially starting from the 1970s, many international conferences, meetings, and research have started to gain momentum. In 1972, within the scope of the United Nations Conference on the Human Environment held in Stockholm, the United Nations Environment Programme was established for the first time. Following this first step, the World Climate Conference (1979) and the Montreal Protocol (1987) took steps to protect the environment and atmosphere (Barbour, 2010).

On the other hand, climate change is seen as both a national and international security

problem. The concept of security, which was addressed in a multidimensional manner, especially in the post-World War II period, has started to be re-evaluated with global warming. Due to the systematic warming of the World, the probability of facing many risks such as melting glaciers, rising water levels, and resource depletion is increasing. One of the biggest problems in this context is water scarcity. There is a possibility of wars in the coming years due to water scarcity. It is also expected that people will be forced to migrate due to reduced agricultural activities or epidemics. Such situations not only affect environmental security but also many other areas of security. Another area affected by these impacts is human rights. There are many international initiatives to ensure these rights and security.

From the early days, the European Union has taken an active role in conferences organized on international platforms and has assumed a leadership role at the international level in agreements and protocols. Policies and strategies built in this field have been formulated and the European Union has provided the most effective efforts to protect the environment. The environmental policies implemented within the European Union have become a role model for many countries. At the same time, questions have arisen as to what role adaptation strategies and policies have played in climate-related disasters how successful these policies have been so far, or how successful they can be. In order to answer these questions, it is important to examine the disasters and impacts of climate change in the European Union and to see the role of these strategies in these disasters.

The problem that this thesis seeks to answer and analyze is how the European Union has addressed the security challenges related to climate change and what impact this has had on environmental security and human security.

The research methodology used to carry out this analysis is qualitative. The qualitative approach is a research technique that adopts a process of addressing and revealing perceptions and events in their natural environment and with realistic integrity by using qualitative data collection techniques such as observation and document analysis. The qualitative research technique adopts an interdisciplinary and holistic perspective. It examines the research problem with an interpretive approach. In this research technique, facts and events are analyzed in their own context and the meanings attributed to those

facts and events are questioned (Yildirim & Simsek, 1999). This is precisely why the qualitative approach was chosen in this study. A deep understanding of the subject matter was aimed. While evaluating the facts, it was aimed to reveal the facts in a more concrete way by supporting them with the analyzed events.

This research covers the period since climate change started to be mentioned as a problem on the international platform. In this period, the steps taken by the European Union on climate change are examined chronologically. With the two examples selected in this context, the aim is to concretize the facts and events analyzed and to see how they are used in a certain plane.

Within the scope of the research, firstly, climate change will be defined, its causes and consequences will be analyzed and how international action is taken will be analyzed. It will be explained how climate change and global warming have become a precautionary issue within the European Union. What roles the European Union has taken in international conferences, protocols, or agreements and what values it has adopted will be analyzed. The aim here is to understand the processes that have led to the current state of affairs and to comprehend the basis of the current policies of the European Union.

In the second chapter, the concept of security will be discussed. The evolution of the concept of security to its current form will be explained and its place in theories of international relations and its connection with global warming will be established.

Within the framework of this relation, which sub-branches of security are affected by climate change will be examined. During this examination, the interconnections of the sub-branches of security will also be emphasized. The types of security emphasized in this research are environmental security and human security. The relationship between these security types will be analyzed and the effects of climate change on these security types will be explained in the context of the European Union.

In the third part of the research, the policies of the European Union on climate change will be analyzed. In order to understand how these policies were established, they will be linked to the first two chapters of the research. This linkage helps to understand in chronological order how the policies emerged and on what basis they were based. No research has been carried out on the basis of national policies, with particular reference to policies in the European Union. The aim here is to examine the role of the European



Union in global policies at the level of decisions and measures implemented in environmental policies and to understand how adaptation strategies play a role in climate change-related disasters. This chapter is of great importance in order to see the role of the European Union as a whole in environmental policies and, in the context of climate security, in combating the negative impacts of climate change in foreign policy. Finally, there are two case studies analyzed in the fourth chapter. *Urgenda Foundation v. State of the Netherlands* and *Agostinho and Others v. Portugal and 32 other States* were selected as case studies. There are important details about the selection of these cases. First, *Urgenda Foundation v. State of the Netherlands* is a unique case in terms of the Court's judgment and litigation process. For the first time in an environmental case, the Court ruled that the government had breached its human rights obligations under the European Convention of Human Rights. Another exemplary case, *Agostinho and Others v Portugal and 32 Other States*, is a case in which the European Court of Human Rights prioritized the importance and urgency of the issues raised. The case is still pending, but it is of interest because of the subject matter and the fact that some of the plaintiffs are unrepresented.

The concluding chapter will provide a general outline of the analyzed chapters. While analyzing the literature in the research, international treaties and policy texts will be utilized and articles, books, and research written on this subject will be utilized.

## CLIMATE CHANGE

Throughout 4.6 billion years of geological history, there have been ongoing changes in climate at different levels. Natural factors such as continental drift, changes in solar radiation, volcanic emissions, and internal fluctuations in the atmosphere have played a decisive role in climate change until the Industrial Revolution in the 18th century.

However, in addition to these natural factors, human activities, especially industrial activities, have emerged as one of the determining factors in increasing the amount of greenhouse gases in the atmosphere. Therefore, when defining climate change, human impacts should be taken into account along with natural factors (Pittock, 2017).

Climate change is one of the most debated topics of recent years by scientists, researchers and governments. To understand this term, it is first necessary to define climate. Climate comes from the Latin *klimats*, from the Greek *klima*. Inspired by the slant of the Sun's rays, it was described with these words meaning "tilt". Until the 18th century, it was believed that the temperature value was the same. Scottish geologist James Hutton, who worked in the field of geology, revealed that the climate was changing and would change periodically (Young, 1995). After James Hutton, Swiss geologist Louis Agassiz introduced the concept of the "ice age" for the first time and stated that Europe was covered with ice during this period. Following Agassiz's research, Joseph Fourier determined the Earth's average temperature after the ice age and showed what changes occurred when the ice age ended. Although the World Meteorological Organization defines the term climate as "average weather", it is more scientifically defined as "a statistical description of the variability and averaging of the quantities involved over a period of time" (World Meteorological Organization, 2017). German meteorologist Wladimir Peter Koppen defined the term climate as "the sum total of atmospheric conditions in a habitable place on Earth for plants, animals, and human" (Yildirim & Simsek, 1999). This shows that climate has a direct impact on the living conditions of all living things. It is also one of the important factors that shape the natural environment and determine the climate environment (Martin, 2005). When we look at the factors that determine the climate, we come across conditions that affect atmospheric circulation such as latitude, altitude, and water bodies. These conditions appear in different forms in different geographical areas.

According to climate researcher Mike Hulme, climate and weather are two terms that are often confused and difficult to distinguish. Weather is about predicting temperatures and precipitation probabilities for the near future based on information from several centuries. Climate, on the other hand, is the structuring of the past or categorization of the future based on an average of three or four centuries, taking into account the weather (Hulme, 2016).

John Tyndall continued the work of scientists and found that different gases in the atmosphere have different absorption rates. In the 1890s, Arvid Hogbom calculated how much carbon was emitted by carbon emitters that supplied the natural carbon cycle. He also compared how much carbon was emitted and how much this emission increased with industrialization (Weart, 2008). However, the first scientist to raise the issue of global warming, which is discussed in the present, was Svante Arrhenius, in 1896, building on Hogbom's research, stated that human activities were doubling the amount of CO<sub>2</sub> in the air and causing the air to warm. Arrhenius used the term "global warming" for the first time (Arikan & Ozsoy, 2008).

Sudden temperature changes, sea level rise, droughts, floods, or changes in precipitation patterns and amounts occur as a result of changes in the atmosphere. With these changes, the concept of climate change has emerged. Climate change should be kept separate from weather events. When the climate deviates from the average and goes out of the standard, it triggers abnormal statistical changes.

The term global warming is part of climate change. It has accelerated, especially since the Industrial Revolution, with the use of fossil fuels, deforestation, and increased greenhouse gas emissions. This acceleration has led to an increase in the temperature of the Earth's surface due to changes in the gas levels in the layers of the atmosphere, affecting the climate (Landsberg, 1970). With the increase in studies in this field starting in the 1950s and the interest of many scientists in this subject, they realized that water vapor was in the upper layers of the atmosphere and that carbon emissions would be a major problem in the 2000s. Between 1965 and 1979, there were more than 50 papers with predictions of global cooling and global warming. As the results of the research were shared, social formation began (Weart, 2008).

In the 1980s, it was recognized that there was a gas causing global warming. In 1985, it was recognized that not only CO<sub>2</sub> but also methane and chlorofluorocarbon gas were

causing global warming (Wheart, 2008). These gases were also recognized to increase as a result of human activities.

### **Causes of Climate Change**

The World experiences global warming periodically due to internal and external movements. On the other hand, human activities significantly increase the global warming process. Artificial factors, such as human activities, are increasing the rate at which the Earth is warming.

Milutin Milankovic published a paper showing that the Earth's orbit around the Sun changes every 95,000 years. At the same time, the Earth's axis also shows periodic shifts and circular deviations. These findings were confirmed by other scientists in the following 30 years (Cavdar, 2002). The Earth's first experience of this period lasted 100,000 years and manifested itself as global cooling. In the same way, there is much evidence that proves this situation. Even without human activity, the Earth naturally warms and cools (Kadioglu, 2007).

Changes in the Earth's axis change the amount of energy coming from the Sun. For example, when the changes in the Earth's axis and climates are analyzed, the current inclination of 23.4 degrees will decrease to 22.6 degrees 10,200 years from now and according to this information, the Earth will be on a cooling trend (Kadioglu, 2007).

The shifting movements of the continents also have a great impact on climate change. The shifting of the continents, ocean movements, ocean currents, atmospheric winds, volcano activities, and many other conditions have effects on climate. In particular, volcanic activity affects the rate at which the Sun's rays reach the Earth as a result of the atmosphere raising large amounts of dust. As a result of the eruption of the Pinatubo volcano in the Philippines in the 1990s, the temperature of the Earth dropped by 1 degree in a one-year period (Renewable Energy Sources and Climate Change Mitigation — IPCC, 2011).

Apart from earth movements and continental drift, human activity is the most important factor that has significantly accelerated the process of global warming and exacerbated its effects. This is supported by scientific evidence, which shows that human activities are the most important cause of the temperature increase seen in the 20th century. Increased production with the Industrial Revolution also increased the proportion of gases in the

atmosphere. Due to the unexpected increase in these gases, the ability of the atmosphere to filter sunlight and reduce heat has decreased and temperatures have been observed to increase. It is incumbent upon individuals to identify the sources of these gases and regulate their emissions (Walker, 2010).

A significant proportion of these gases prevent the escape of high amounts of heat from the sunlight reflected from the Earth's atmosphere and cause heating. The scientist Svante Arrhenius proved that these gases cause heating in 1896 (Weart, 2008). These gases have a natural effect on the heating of the Earth. It is thought that without these gases, the Earth would be about 30 degrees cooler. Gases such as water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and ozone (O<sub>3</sub>), which are also essential for human life, are also included in this gas group (Kiehl & Trenberth, 1997). It is known that these gases have increased significantly in the atmosphere after the Industrial Revolution. While carbon dioxide gas should be 0.03% in the air, it has increased by 36% since 1750 and continues to increase. It is known that this increase is due to many reasons such as fossil fuels, improper land use, and deforestation. This gas is one of the major drivers of global warming and climate change (EPA, 2007). Methane gas has increased by 176% since 1750. It is known to increase due to waste disposal, animal husbandry, and some forms of agriculture. The share of this gas in global warming is around 13% (EPA, 2007). Ozone gas is contributing to global warming due to its depletion. This gas traps harmful UV-B radiation from the sun in the atmosphere and prevents it from reaching the ground. However, it is decreasing gradually due to human activities and chlorofluorocarbon (CFC) (EPA, 2007). Nitrous Oxide gas (N<sub>2</sub>O) has increased by 17% since 1750. Its effect on global warming is around 5%. It has increased especially due to the chemical industry (Cepel & Ergun, 2003). Halocarbon gases, another type of gas, are a group of gases that reduce the effect of ozone gas (Cavdar, 2002), although they have increased very little after the Montreal Agreement (1995), which will be mentioned in particular.

While fossil fuels, whose use increased due to the Industrial Revolution, are responsible for the increase in many of these gases, deforestation also has a major impact on the increase in these gases and the deterioration of the atmospheric balance. In particular, the disruption of the carbon balance in the atmosphere and the destruction of trees, which are essential as scavengers of greenhouse gases, have had an accelerating effect on global warming. According to a United Nations report, 31% of the Earth's surface is covered by

forests and 9.4 million hectares of forests are destroyed every year. This not only affects the atmosphere but also triggers disasters such as collapse and landslides (Kadioglu, 2007).

Population growth supports the acceleration of industry and the increase in chemicals used. At the same time, this leads not only to industrial production but also to rapid urbanization and excessive consumption. From 1970 to 2011, the population growth rate reached 90%. Oil and natural gas consumption reached record highs. The number of vehicles and the use of many means of transportation such as air transportation have increased significantly. Aside from the increase in greenhouse gases, this has resulted in land and urbanization being built in the wrong way.

Although the effects of global warming are expected to increase in the coming years, they are already being felt in the present. For example, the collapse of the biggest glacier at the South Pole in 2002, the melting of glaciers in Iceland, and the increasing rate of melting in other glaciers are the first visible signs of global warming. At the same time, the increase in floods is closely linked to the rise in mountain temperatures. This reduces fertile soils and increases the problem of drought (Brown, 2006). The serious melting of the Himalayan glaciers and experts' prediction that all glaciers will melt by 2035 are also evidence of global warming (Onay, 2002).

Throughout history, people have coped with many natural disasters. Most of the natural disasters that have increased in recent years are caused by global warming. In addition to the increase in natural disasters in these years, many deaths and serious material damages also occur. For example, a cyclone in India killed 10,000 people. Many settlements in Pakistan and Bangladesh were flooded for months. These countries with serious loss of life and property are usually developing countries. This is the result of inadequate environmental policies, lack of infrastructure, and unconscious deforestation. Floods not only cause loss of life and property but in the long run, also lead to the loss of fertile land. This increases the risk of famine in large-scale periods. Another example of this situation occurred in China. When the Yangzte River overflowed, 3000 people lost their lives and nearly 30 billion dollars in material damage was caused. At the same time, the deltas near the river became unproductive (Enzler, 2011).

In the Americas, there has been an increase in hurricanes. In 2011, in particular, many states were hit by devastating tornadoes, and many people were killed. Large states such

as Alabama, Georgia, Mississippi, and Tennessee were devastated and many homes were damaged, and for a long time, some cities in these regions were without electricity, and nuclear power plants were shut down (BBC News Türkçe, 2011).

Not only on land but also off the coast of California and in the Pacific Ocean, marine plants are affected. For example, the creatures called *varek* living in this geography have decreased drastically and according to experts, 40% of all zooplankton will disappear (Kovel, 2005). Not only zooplankton but also fish are decreasing day by day as a result of uncontrolled overfishing. Thirteen of the World's 17 largest fishing grounds have disappeared. Apart from uncontrolled fishing and overfishing, waste dumped in the seas has degraded aquatic habitats and 40% of fertile land has become unproductive after 1970 (Kovel, 2005).

Current research shows that between 1860 and 1900, the temperature increased by 0.5-0.8 degrees Celsius. This compares with an increase of 0.58-0.92 degrees Celsius between 1900 and 2005. According to the IPCC report, this temperature increase is expected to be 1.1-6.1 degrees Celsius. All measures, conferences, agreements, and efforts are aimed at slowing this warming. This effort is aimed at preventing the expected melting of glaciers and sea level rise of up to 60 cm, loss of fertile land in coastal areas, loss of freshwater resources into the sea, droughts, fires, heavy rains and floods, and reduction in lake and river waters. In addition, the threat of extinction of some plant and animal species, the emergence of different viruses and bacteria, and epidemics are also expected (AR4 Climate Change 2007: Synthesis Report — IPCC, 2007).

### **Consequences of Climate Change on Human Rights**

The natural environment provides people with basic needs and resources. The ecosystem includes needs such as clean air, food, clean water, and energy resources, as well as the areas and climate systems necessary to sustain our social, cultural, and economic activities. These factors are essential for survival and sustainability. There is therefore a vital link between environmental conditions and human rights. The ability of nature to regenerate itself and its efficiency has a major impact on the functioning of the socio-economic system. When nature is unable to regenerate itself, not only environmental but also social imbalance effects occur. The environmental impacts of these negative effects are usually sudden and fast-acting natural events such as hurricanes, floods, and heat waves that threaten people's health and safety. On the other hand, environmental

degradation factors that develop over time, such as the decrease in vital resources such as clean water and food, rising sea levels, melting of glaciers, or collapse, also affect people over time. The observations and predictions shared in the reports of the IPCC have made significant contributions to the development of an understanding of the dangers and risks of climate change and to raising awareness, as well as the work of human rights organizations, academics, and non-governmental organizations, reveals the effects of the irreversible and mostly human-induced ecological crisis not only on the natural environment but also on individuals, societies, and cultures. In the face of this threat, a grounded approach that prioritizes human rights is essential.

A human rights-based approach requires states and other actors to take action to respect and protect the rights of all people, regardless of nation, region, or culture. The risk of existing inequalities being exacerbated or exacerbated by ecological change should be analyzed and efforts should be made to redress discriminatory practices and unfair power distributions. In this context, new policies, plans, and projects should be developed.

The IPCC 5th Assessment Report (AR5) shows how climate change will affect many people and the physical environment. Although the whole World will be affected, some countries are more vulnerable to this change.

In this case, the most important right that is and will be affected by climate change is the right to life. Changes in the ecosystem and the balance of nature caused by climate change affect the security of people's lives and vital needs due to the destruction caused by cities and their infrastructure. Sudden meteorological disasters cause serious loss of life. According to studies, approximately 400,000 people die annually due to disasters caused by climate change. This number is estimated to rise to 700,000 in the 2030s (Dara, 2012). At the same time, climate change creates the risk of food and water shortages. This directly or indirectly affects the right to life. International human rights law recognizes the right to life as a supreme right.

Another right affected by climate change is the right to health. Malnutrition and lack of access to hygiene due to food and water shortages caused by climate change trigger many diseases. At the same time, not only individual illnesses but also epidemics and mass deaths can occur. In addition to physical illnesses, psychological illnesses are among the negative effects of climate change (Myers & Others, 2012). This fact, which threatens not only underdeveloped and developing countries but also developed countries, also changes



the possibility or duration of access to health services, making it difficult to access needs such as medicine and treatment. The right to health encompasses taking measures to ensure standards of physical and mental health (Humphreys, 2010). This also requires taking measures to respond to climate change so that the right to health is not jeopardized. Another consequence of climate change is the difficulty of safe access to vital necessities. An individual needs to consume an average of 20 liters of clean water per day for his/her health. Meeting these needs has become more difficult with the decrease in the availability of clean water due to climate change and the change in the quality of clean water (The World Bank, 2010). Another requirement for survival is that an individual should consume 2100 calories per day. However, due to climate change, droughts and droughts are occurring, biodiversity is disappearing, and agricultural activities are decreasing. It is known that agricultural land will continue to decrease in the coming years (AR5 Climate Change 2013: The Physical Science Basis — IPCC, 2013). It has been stated that even with a 1.5 degrees Celcius change in temperature, many people are at risk of starvation and 3 million people could die unexpectedly each year (The World Bank, 2010).

Another right affected by climate change is the right to housing. Coastal areas, delta areas, small islands, and arid and semi-arid regions are considered risky settlements. Low-risk settlements face the risk of mass migration waves (United Nations, n.d.-b).

Another impact of climate change is that societies are forced to abandon their traditional ways of life and areas. Many island states, especially in the Pacific region, are threatened by rising sea levels and weather events. They are more likely to experience political, economic, cultural, and social disruptions and to be forced to leave their countries. International law clearly emphasizes the principle of equality of peoples and their freedom of self-determination (International Covenant on Civil and Political Rights (ICCPR), Equality and Human Rights Commission, n.d.). However, the ability of societies to exercise these rights is jeopardized by climate change. At the same time, socially, economically, politically, or institutionally marginalized groups or individuals in society are more vulnerable to climate change (AR5 Climate Change 2013: The Physical Science Basis — IPCC, 2013). Those who are and will be most affected by the predicted and actual negative changes of climate change are disadvantaged groups, who are already marginalized and vulnerable in society, these disadvantages are likely to

become more prominent figures and inequality is likely to increase (Sachs & Others, 2022). One of the vulnerable groups is indigenous communities. Climate change has a direct negative impact on the culture, vital resources, and traditional diet of indigenous communities. This situation leads to land encroachment and violation of property rights, which affect the way of life of indigenous peoples, their coexistence, and the continuation of their cultural activities. At the same time, it is important that indigenous peoples are recognized as guides in the fight against the climate crisis, as they know the geographical characteristics of their lands (Kahraman, 2022).

Other disadvantaged groups affected by climate change are women and children. While women are already at risk due to gender discrimination, they are becoming more unequal with the risks associated with climate change. Particularly in developing countries, women who depend on the land for their livelihoods are disadvantaged by both economic and environmental factors. The United Nations Framework Convention on Climate Change (UNFCCC, 2007) also emphasizes the need to take gender-related disadvantages into account. There are also detailed plans to protect women's rights in international human rights texts (UNEP, 2015).

On the other hand, children face the risk of not being able to meet their vital needs such as food, hygiene, and access to water due to climate change. Many children are already dying as a result of malnutrition. At the same time, disease rates are rising for the same reason. Although international agreements guarantee that children have access to the highest level of health care available to them, states need to take action (Convention on the Rights of the Child, n.d.).

Under international law, states are the primary actors to protect the rights of individuals. The sub-branches of international law, international environmental law, and human rights law, also require states to consider the climate crisis when formulating their policies. States have obligations to protect, respect, and fulfill human rights under three main headings. In this context, states need to recognize the impact of different external factors, such as climate change, on these obligations and take action accordingly.

Due to these unfavorable conditions caused by the impact of global warming, global food prices have also increased. According to the United Nations, in February 2011, food prices were the highest in 20 years. At the same time, the increased use of biofuels has led to an increase in the use of these fuels by agricultural producers, while at the same

time, biofuel prices have increased. The damage these fuels cause to the environment is enormous. As can be seen, sectors such as food and energy are the most important sectors of this last century. This pollutes water and soil and has therefore contributed to the water problems of recent years. At the same time, one of the biggest problems for the 21st century will be water scarcity. The warming of the Earth and the decrease in precipitation have also caused and will cause this problem to increase. The water crisis also directly triggers the food problem (Bascelik, 2003). Currently, 3% of the water in the World is fresh water. Of this fresh water supply, only 0.3% is suitable for human use. Water use and demand are expected to increase due to the Industrial Revolution, uncontrolled population growth, and improper urbanization. At the same time, about 2.6 billion people today live in unhealthy conditions due to a lack of access to clean water. Every day 3900 children die from diseases due to lack of access to clean water (Spence, 2007).

### **Impacts of Climate Change on the Environment**

Since the beginning of human existence, there have been many processes and changes such as hunting and gathering, the transition from nomadic to a sedentary lifestyle, the agricultural period, transition to the industrial production style. Human have harmed nature and habitats in every period, although there has been a significant increase, especially with the Industrial Revolution. Human have benefited from natural resources in every period and will benefit from natural resources in the future. The increasing use of these resources with increasing population and developing technology is disrupting the natural balance and environmental systems. This situation has brought about global climate change.

It is a wrong approach to consider the effects of climate change on the environment only as an increase in temperature. The damage to the ecosystem is increasing gradually. Although the Paris Climate Agreement aims to limit the temperature increase to 2 degrees Celsius, the IPCC estimates that the Earth's temperature will increase by 4.5 degrees Celsius by 2100 (AR5 Climate Change 2013: The Physical Science Basis — IPCC, 2013). In order to reach the targets, states are either slow or do not take the necessary actions to reduce emissions. As mentioned before, although every country in the World will be affected by the climate crisis, some regions and countries will be more affected by these changes. In the event that the temperature does not decrease and rises continuously, it is

estimated that higher temperatures will be observed, especially in humid regions (Baskaya, 2020).

Problems such as deformations in many agricultural lands, especially agricultural lands in African countries, increasing salt content of the soil and inefficiency, as well as problems such as increases in diseases and famine are foreseen. In the Asian continent, especially in South Asia, in addition to the aforementioned problems, a rise in water levels is expected. In South Asia, this means that settlements, especially along the coastline, will be affected and many people will become homeless and must leave their homes. For many nations, cities along the coastline are important both socially and economically. This has and will continue to have an impact not only on the relocation of individuals but also on the economies of nations.

Factors such as human activities in the ecosystem, wrong land use, destruction of forests, and environmental pollution lead to the deterioration of the ecosystem. Changes not only in nature but also in the population of living things change the balance of the habitat. Human activities also lead to the extinction of many species, forcing them to relocate. In Madagascar, it is estimated that around 12,000 plant species and 190,000 animal species have disappeared due to ecosystem destruction (WCED, 1987).

Considering the effects of climate change, the excessive use of fossil fuels has reached a dangerous level. It is also a matter of curiosity what kind of a scenario the decline of non-renewable energy sources may create in the future. There are measures that can be taken in this situation and are supported by international agreements. However, there are many countries that do not take these measures or implement them incompletely.

Due to the melting of glaciers, sea level rise, and increase in water volume, impacts such as shrinkage of coastal areas and flooding are expected to increase. Especially with the increase in flooding and the destruction it will cause in cities, an increase in diseases such as fever and fever is expected (Kaya, 2020). It is estimated that 25,000 square kilometers of land will be lost in the US in 70 years as a result of the collapse of the polar ice caps and the melting of glaciers. At the same time, as a result of these changes and the rise in temperature, there are also changes in the species of life in the upper oceans. The migration of oceanic creatures that live in the temperate zone to the north has been detected. This situation affects not only the aquatic ecosystem but also the land ecosystem (Demir, 2009).

Natural greenhouse gas is a necessary gas for the Earth. However anthropogenic greenhouse gas has caused the earth to warm up by disrupting the balance of nature and the ecosystem. It has caused the ecosystem to react by disrupting the ecosystem order due to warming. The use of fossil fuels is the biggest factor in increasing greenhouse gas emissions. The use of fossil fuels, which increased with the Industrial Revolution, is encountered in many areas from production to transportation. Fossil fuels, which emit high levels of carbon dioxide, have been seen as an indispensable energy source due to the huge increase in consumption. However, especially since 95% of oil resources have been discovered and it is an unsustainable energy source, the search for alternatives is ongoing. Nevertheless, due to the continued use of oil in many areas, greenhouse gases are increasing day by day and reaching an irreversible point (Sevim, 2011). With the increasing temperature, water evaporation occurs more than normal and has caused an increase in water vapor in the atmosphere. With increasing water vapor, the temperature increases even more. At the same time, water evaporation negatively affects the aquatic ecosystem by increasing the salinity level of the seas and oceans (Batan & Toprak, 2020). Although agreements such as the Kyoto Protocol and the Paris Climate Agreement are trying to encourage a shift towards renewable energy sources, the rate of oil use is still high in undeveloped and developing countries. The reason for this is that undeveloped countries cannot allocate funds for renewable resources. However, the aforementioned agreements have enabled developed countries to allocate funds to undeveloped and developing countries (Kaya, 2020).

Water resources are essential for the realization and sustainability of agricultural production. Drought with increasing temperatures poses a major problem for the sustainability of agriculture. At the same time, the increase in natural disasters such as floods in some regions or fires due to heat are also some of the consequences. These situations can cause not only temporary but also permanent damage to agricultural land and may render it completely unusable. The occurrence of geographically improbable natural disasters also increases the extent of destruction due to people being caught unprepared and failing to take precautions. Reduced agricultural production and changes in production patterns due to climate change led to reduced productivity. The FAO's Food Security Report found that Africa is at great risk and that people living in the region are undernourished. This situation causes physical and mental developmental retardation in

children and infants (Akalin, 2014). It is possible to see the effects of the climate crisis not only in underdeveloped countries but also in developing countries. The economic source of the majority of developing countries is agriculture. The usage of water in agricultural production is high. It is important for these countries that the amount of water used is well regulated and that water is used efficiently. It is necessary to take measures in this regard and inform the producers (Aydogdu, 2020). Due to the increase in temperature, agricultural production is expected to shift to the northern regions and agricultural production is expected to increase in these regions (Godrej, 2003).

Forests, on the other hand, are an indispensable part of the ecosystem. By sequestering some carbon dioxide, forests slow the warming of the atmosphere by greenhouse gases from human activities. But this is not enough. Changes in temperatures are causing many tree species to be unable to survive (Maslin, 2009). Another cause of deforestation is forest fires. Due to the climate crisis, forest fires are increasing in many parts of the World. As a result, 34% of the World's tropical forests have been lost and 30% destroyed (Godrej, 2003). This is not just the destruction of trees. Forests are home to many living things. The Amazon Forest is home to 10% of the World's plant and animal species. It also provides 20% of the World's oxygen. The destruction of such important habitats by forest fires is one of the factors accelerating the climate crisis.

Human health is the primary negative factor affected. The European Environment Agency estimates that if temperatures continue to rise at this rate, the associated death toll could rise to 200,000 people per year (Pringle & Others, 2015). Respiratory diseases associated with increased temperature increase the risk of death, especially in the warmer months. In addition to physical illnesses such as diabetes, high blood pressure, and infections, there is an increased incidence of mental illnesses such as depression. Deaths can occur not only in the hot months but also in the cold months due to overcooling. In this case, there is also a lack of health services. To reduce these deaths, it is critical to reduce greenhouse gas emissions and for governments to support green energy policies. In 2021, the climate crisis triggered flood disasters, especially in Belgium and Germany. Research has shown that climate change has triggered and increased this disaster by between 3% and 19% (Erkul Kaya, 2021). Apart from extreme temperature changes, air pollution affects all people. The rate of breathing polluted air is quite high (WWF, 2019). The World Health Organization has pointed out that infections and epidemics may increase

and become more widespread in connection with the climate crisis. It mentioned that there may be risks not only in underdeveloped countries but also in developed countries. The link between Covid-19 and climate change is still under investigation (Marazziti, & Others, 2021).

Migration has existed since the beginning of human existence. There may be many reasons for migration. One of these factors is the environment. Climate change has historically been a cause of migration. However, in the current century, the rate at which climate affects migration has increased (Ilik Bilben, 2018). This increasing rate of migration has led to the emergence of the concepts of climate migrant and climate migrant. The concept of climate refugees describes people who are displaced and forced to relocate as a result of environmental problems and natural events. Displacement can occur for a variety of reasons, such as droughts, urbanization, and improper land use. Many people are also forced to move due to disproportionate population growth and poverty. Natural events such as floods, hurricanes, and storms caused by rising temperatures also trigger these migrations. In the future, planned or unplanned migration is expected to increase due to these situations and sudden natural events such as erosion. Large groups of people living in coastal areas and cities constitute a risk group that may create large waves of migration due to the negative effects of rising water levels. Unless the necessary precautions are taken, the likelihood of these migration waves turning into a humanitarian crisis is very high. These migrations are expected to come mainly from Latin America, South Asia, and Sub-Saharan Africa. The World Bank has reported that by 2050, 143 million people will be displaced by sea level rise, inadequate food production, or water scarcity (Ferris, 2020).

### **International Environmental Politics**

The fight against climate change has been ongoing for many years. The consequences of climate change are increasingly affecting people and becoming more dangerous. In this chapter, we will first chronologically analyze international conferences, protocols, and agreements and then describe how the European Union has developed its environmental policies within this framework. Adaptation involves preparing both economic and physical capabilities for the devastating effects of climate change. Mitigation is based on the policy of reducing or eliminating human-caused factors that affect the course of

climate change. For example, one of these policies is based on reducing greenhouse gas emissions (Seyhun & Mutlu, 2011).

When examining the steps taken in the name of climate change, it is evident that as the years go by and the effects of climate change become more visible, policies and plans have increased. They are often aimed at reducing carbon and ending the use of fossil fuels. The first chronological international step towards climate change was the United Nations Conference on the Human Environment (1972) in Stockholm. This conference was organized because the issue of the environment and climate change had reached a critical dimension. And it was an important step (Gundogan & Others, 2015).

The importance of this conference is that it laid the foundations of international environmental law. Subsequently, the decisions taken at this conference were included in the introduction of international environmental law. They mentioned the rights of all living beings, including human beings, and emphasized the need to respect them (Pallemaerts, 1997). The emphasis of this conference is that man should protect the environment develop in accordance with nature and not engage in wrong practices. Air, water, soil pollution, and damage to the ecological system were emphasized and protection of natural resources was aimed. At the same time, Article 21 of the Stockholm Declaration drafted at this conference has acquired the character of hard law. In this article, it was emphasized that states have the right to use their own resources, but they have a responsibility not to harm the environment of other states (United Nations, 1972). The First World Climate Conference (1979) is recognized as the second step taken in this field. At the same time, with this conference, scientific attempts were made to prevent the climate crisis. The most important initiative of the conference was the approval of the idea of establishing a "World Climate Programme". The World Meteorological Organization, the United Nations Environment Programme, and the International Council of Scientific Unions are responsible for this program.

Another important development is the Vienna Convention. Signed in 1985, it also addressed the Villach Conference. During the Villach Conference, it was recognized that climate change is a human-induced phenomenon. The decisions that came out of this conference resulted in recommendations on many issues such as long-term projects, the proper use of agricultural land, and the management of water resources. In particular, the need to take measures against sea level rise was emphasized. Decisions were taken to



protect the ozone layer, such as reducing the use of substances such as oil and coal and reducing greenhouse gas emissions. The Vienna Convention is a treaty in which decisions were taken to protect the ozone layer. Considering that climate change could be controlled, countries were asked to work selflessly in this regard (UNEP, 1985).

The Montreal Protocol on Substances that Deplete the Ozone Layer is a protocol prepared after the Vienna Convention and includes decisions on substances that deplete the ozone layer. This protocol focuses in particular on the use of human-made chemicals. The use of ozone-depleting substances has been restricted and especially developing countries have achieved this goal. Similarly, the Toronto Conference on the Changing Atmosphere (1988) again focused on some common issues, including the need for governments to work on specific agreements on the atmosphere (WMO, 1988).

In the same year, the Intergovernmental Panel on Climate Change (IPCC) was established by WMO and UNEP. Its purpose is to investigate the causes and consequences of climate change and to find solutions by researching effective ways of combating it. Assessment reports are prepared every five years describing climate change and indicating the factors to be considered. The reports are based on the assessments and recommendations of three working groups. The first group investigates the causes of climate change and prepares a report on this issue. The second group focuses on the economic and social aspects of climate change, while the third group focuses on the consequences of climate change and recommendations for solutions. The 3 separate reports are combined into a single 5-year report (Gundogan & Others, 2015).

IPCC is a worldwide organization that is not aligned with any specific countries. It publishes reports that are scrutinized and taken into account by governments, and this makes the IPCC an institution for the public. At the same time, these reports have been the basis for many future climate conferences and international steps to be taken. It continues its activities in the present as an important organization on climate change (WMO, 1988).

The Second World Climate Conference (1990) proposed a framework treaty on climate change. It is important to draw attention to sustainable development. A more realistic perspective was put forward in terms of placing different responsibilities on countries with different levels of development (Zemp, 2008). The conference consisted of scientific

panels. The most important of the proposals discussed in the scientific panels was the realization of actions requiring international cooperation on climate change (Bodansky, 2001).

The United Nations Conference on Environment and Development was held in Brazil in 1992. The conference dealt with changing production and consumption patterns on an international scale. At the same time, it was noted throughout the conference that economic, social, and environmental impacts affect all sectors. The importance of sustainable development was also a major theme of the conference. The Rio Declarations emphasized the need for people to live in harmony with nature and the importance of making efforts to achieve this. At the same time, it is among the principles of the declaration that environmental policies should be adopted, that states should be careful in their choice of resources, and that the level of development of countries should be evaluated in proportion to the damage they cause to the environment. The main goal then is to protect and restore the Earth's ecosystems (United Nations General Assembly, 1992). It is clear from the Rio Declaration that the solution to this crisis, which affects the whole World, should also be considered on a global scale and cooperation is necessary. It is important that not only states but also individuals cooperate on this issue.

The United Nations Framework Convention on Climate Change is one of the important developments that emerged from these conferences. This agreement entered into force in 1994. Its most important article is that human intervention should not impede action on the climate crisis. Prevention of anthropogenic greenhouse gas emissions is the most important issue addressed. It is aimed at developing economic activities in connection with sustainable resources (UNFCCC, "What is the United Nations Framework Convention on Climate Change"). The need for developed countries to provide certain financial assistance to developing countries to avert the climate crisis was emphasized. It was decided to conclude agreements on this issue. In developed countries, climate crisis measures should be taken, and annual reports should be prepared. These annual reports should include the actions taken by industries to address the climate crisis. These reports have also been requested from developing countries but over longer periods rather than annually. This long-term agreement is seen as useful in reducing greenhouse gas emissions, even if there is an increase in greenhouse gases in the following years (UNFCCC, 1994).

One of the major steps taken to address the climate crisis is the Kyoto Protocol. Adopted in 1997, the Protocol calls for a reduction in greenhouse gas emissions in developed countries and that policies should be formulated with the climate crisis in mind. The Protocol also calls for regular reporting on the implementation of measures to address climate change. It recognizes the high greenhouse gas emissions of industrialized and developed countries and places more responsibility on developed countries. In addition, the Protocol has set greenhouse gas emission reduction targets for industrialized countries, developing countries, and especially the European Union countries. This target, which envisages a 5% reduction in greenhouse gas emissions, was achieved between 2008 and 2012 (UNFCCC, "What is the Kyoto Protocol?"). This target is stated in Article 2 of the Kyoto Protocol. It also emphasizes sustainable agriculture forest management and renewable forms of energy. The development of environmental technologies is targeted, and the promotion of energy efficiency is also included. It also emphasized the need to develop regional strategies, not just international ones. It is also important to note that Article 6 mentions the purchase of emission units to reduce anthropological emissions, while Article 10 talks about reducing the drivers of the climate crisis (UNFCCC, "What is the Kyoto Protocol?").

It is important for every country to commit to reducing greenhouse gas emissions in order to avert the climate crisis. In this protocol, it is seen that countries have set targets for this commitment. Some of these countries and their targets for the years 1990-2008/2012 are as follows; European Union countries +8%, Switzerland, Lithuania, Monaco, Czech Republic, Bulgaria -8%, Japan, Canada, Poland, Hungary -6%, Croatia -5%, Russian Federation, Ukraine, New Zealand 0, Norway +1%, Australia +8% and Iceland +10%. (UNFCCC, "Kyoto Protocol -Targets for the first commitment period").

With the Kyoto Protocol, efforts were made to ensure that countries helped each other to achieve the goals set by the countries. Especially with the necessary mechanisms and technological aid, developed and industrialized countries have been enabled to help underdeveloped countries (Kyoto Protocol Flexibility Mechanisms - DCCEEW, 2022). According to the protocol, a country that is developed and has a commitment to reduce greenhouse gas emissions is to help a country that has a developing system to establish emission reduction. This increases solidarity between countries while also promoting sustainable development. At the same time, while implementing these commitments

Mechanisms have been established to find more economical and appropriate methods (UNFCCC, “Joint application”).

One of the agreements made to find a solution to climate change is the Paris Agreement. The Paris Agreement is legally binding on climate change. The aim of the agreement is to ensure that the impact of climate change on global warming remains limited to 1.5 degrees Celcius. 196 countries signed the agreement in 2015. This statement is seen as a turning point in the climate crisis. It has been discussed not only to prevent climate heat but also to increase the measures taken against the negative persistence created by this heat. It is seen as the most important agreement valid in the present (Cameron, 2008).

It was emphasized that states should protect their forests, greenhouse gas emissions should be consistent, and adaptation should be made to the negative effects of climate change. The importance of forest management was emphasized. At the same time, the role of sustainable development in preventing or reducing the damage caused by the negative effects of climate change is important and is reserved for this in the agreement. It should aim to prepare this understanding for individuals. At the same time, preparations for emergencies, early warning systems, and risk management training need to be updated (Cameron, 2008).

With the Paris Agreement, it is important for states to declare that they will be able to monitor its change. It also provides information about the measures to be taken against the effects of climate change or the installed systems that are not only economical to reduce greenhouse gas emissions. Whether serious investments need to be made in this regard, consolidation of knowledge is the only option. At the same time, the necessity of technological development is an important choice included in the agreement. It has been claimed that technological developments are required to be compatible with climate change and comfort or to prevent climate change (Publications Office of the European Union, 2017).

The institution that regulates the steps and activities related to climate change in the global arena is the United Nations. States are also trying to support this effort of the United Nations. In the early periods, the European Union respected the decisions of the United Nations and adopted their decisions (Erdogan, 2018). The European Union has an active role in the conferences held on global warming, especially regarding the scope of the problem and solution suggestions. The European Union has hosted or participated in the

organization of many conferences and events. The European Union, which has taken important steps in environmental policies, played a leading role in the Paris Agreement. At the same time, the European Union's leadership in implementing the decisions taken has become an example for other countries. At the same time, being a pioneer in implementation has shown that they take the conferences and agreements made more seriously and that other countries should take them seriously as well.

The previously mentioned conferences, agreements, and declarations have an important role in the evolution process of the European Union's environmental policies. According to the studies carried out by Andrea Lenschow in this field, European Union environmental policies can be divided into three different periods. The first phase is the period starting from 1972 until 1987, the second phase is the period between 1987 and 1992, and finally, the period starting from 1993 until present (Lenschow, 2010).

These periods follow a chronological development process in direct proportion to the international activities, agreements, and declarations mentioned above. The Single European Act and the Maastricht Treaty, which will be mentioned especially in the European Union Policies section, serve as turning points. These milestones are thanks to the fact that they prepare the legal basis that enables planned action when establishing and implementing environmental policies. It refers to the transition from a reactive policy-making process to a proactive policy-making process. On the other hand, the environmental policies produced have also enabled the European Union to change its internal policies. The fact that regulations made in areas such as water quality, waste control, marine pollution, air quality, and the use of chemicals are generally international in nature has also influenced the change in the internal policies of the European Union (Vogler, 2003).

The United Nations Conference on the Human Environment is considered the beginning of the European Union's environmental policy. The action plan prepared with this conference was also an indicator that environmental regulations began to take shape within the European Union. Although actions were primarily taken due to economic concerns, regulations for natural disasters became more prominent over time due to the international nature of the crisis. During this period, efforts were made to eliminate the lack of necessary measures to reduce the damage to the environment and protect nature. In the period between 1972 and 1985, which is considered the first period, the measures

taken regarding the environment were published as a total of 120 directives, 27 decisions, and 14 regulations (Duru, 2007).

It started with the Single European Act in 1987, which is seen as the second period of the European Union's environmental policy. In this process, many important issues such as the aims, principles, and decision-making mechanisms of the European Community have been determined. The biggest rise affecting the development of environmental policies is the increased powers of the European Parliament since it has a decision-making mechanism with a majority vote (Vogler, 2003). During the preparation phase of the Single European Act, the Greens pointed out and criticized the fact that the economic activities of the European internal market could cause environmental disasters and situations that threaten human health. With the third environmental action plan created in this period, these criticisms were effective and the principle of "high levels of protection" emerged. This principle has been an important step taken to ensure the integration of other areas with environmental policies in the future. Another important principle is the principle of "polluter pays" and it is a decision that continues to be valid recently (Knill, 2010). Examining the environmental issue as a separate topic along with the current developments has enabled more in-depth studies to be conducted on this issue. Especially in the field of economic integration, regulations have been developed and new policies have been established. With the production of these policies, a legal basis was created.

The period considered as the third period started with the Maastricht Treaty. With this agreement, the powers of the European Union have also expanded. The strengthening of the European Parliament and the functional functioning of the decision-making mechanisms have brought about the strengthening of legal and institutional mechanisms (Lenschow, 2010). With the Maastricht Treaty, work has begun to lay the foundations of the European Union and make its integration more comprehensive. Later, the Treaty of Amsterdam and the Treaty of Nice also supported developments in the same field. Despite the fact that some member countries of the European Union do not want to provide sufficient support to their environmental policies, the Treaty of Amsterdam has paved the way for the European Union to act as a union rather than a national decision.

The Treaty of Lisbon, which is seen as the continuation of the Single European Act, has made sustainable development the main principle of the European Union. Its scope was expanded with Environmental Policy Integration (EPI) and it continues its effectiveness

as one of the basic texts in the present. The concept of sustainable development, which entered the basic legal framework of the European Union with the Single European Act and the Treaty of Amsterdam, has become one of the main goals of the Lisbon Treaty. This concept, which basically symbolizes respecting the environment while ensuring economic development, serves three main goals; Rational use of resources, a form of competition that makes consumers sensitive to the environment, and binding production methods to norms (Benson & Adelle, 2013). Another important area that the Lisbon Treaty has brought to the European Union is to ensure that steps are taken on energy resources and the climate crisis. Increasing the use of renewable energy resources and the understanding of protecting nature with the energy produced from these resources is also important for the realization of the responsibilities given to countries in the Kyoto Protocol (Günes, 2011).

In addition to agreements, conventions, and conferences, Environmental Action Programs (EAP) are also of great importance in the European Union's fight against the climate crisis. With these programs, the European Union has begun to look for solutions to the effects of the climate crisis.

The First Environmental Action Program covers the period between 1973 and 1976. In this period, environmental policies have become more visible with the increase in green and environmentalist political parties. At the same time, the need to combat environmental problems has also increased. The First Environmental Action Program, which was created for this reason, advocated that environmental policies should be established in line with certain goals. Decisions were taken to prevent air pollution, protect the ecological balance, not exploit the ecological balance, and make city planning respectful to the environment (Official Journal of the European Communities, 1973).

The second Environment Action Program is an environmental program that spanned between 1977 and 1981. Their scope has been expanded compared to the first program. Topics such as human health, the use of agricultural areas, and forestry-related measures have also been added to the program (EUR-LEX - 41987X1207 - EN - EUR-LEX, n.d.). The Third Environment Action Program covers the years between 1982 and 1986. The difference between this program from others is that treatment and recycling, noise pollution, and the integration of environmental policies into other areas are the agenda items (EUR-LEX - 41993X0517 - EN - EUR-LEX, n.d.).

The Fourth Environmental Action Program was carried out between 1987 and 1992. Within this program, 1987 was chosen as the environmental year. The topics included in the program are It aims to protect Europe's natural areas, combat soil erosion, increase environmental knowledge, and determine environmental quality targets (EUR-LEX - 41993X0517 - EN - EUR-LEX, n.d.).

The Fifth Environment Action Program focuses on sustainable development. It covers the years 1993 and 2000. Issues such as preventing soil degradation, protecting biological diversity, desertification, and the high increase in greenhouse gas emissions were also included during the program (EUR-LEX - 41993X0517 - EN - EUR-LEX, n.d.).

The Sixth Environment Action Program focuses on the negative effects of economic growth on the environment. It covers the years 2002 and 2012. In addition to other programs, policies have been established to protect water resources and encourage the market to operate in an environmentally friendly manner (EUR-LEX - 32001L0042 - EN - EUR-LEX, n.d.)

The Seventh Environment Action Program covers the years 2013 – 2020. Thanks to the programs and new policies implemented in the past, air pollution, water, and soil pollution have started to decrease to a certain extent. The most important decision of this program is the European Union's goal of leading environmental policies by 2020. The European Union has decided to make its investments according to its environmental policies. It was decided to prioritize the return to a green economy and to carry out production in a way that respects the environment. It is aimed to determine an environmentally sensitive approach not only in the fields of production and economy but also in the field of infrastructure (EUR-LEX - 32013D1386 - EN - EUR-LEX, n.d.)

The Eighth Environment Action Program is the most up-to-date action program. It covers the years 2020 – 2030. Among the goals of this program, the goal of becoming climate neutral by 2050 is one of the most important goals. In addition, increasing defense systems against the climate crisis, reducing soil, air, and water pollution to zero, and reducing greenhouse gas emissions by 2030 are among the aims of this program (EUR-LEX - 32013D1386 - EN - EUR-LEX, n.d.).



## SECURITY

The concept of security was first used as "*securitas*" by Cicero and Lucretius, in the sense of expressing the mind and psychological state. Since the first century, it has been seen as a fundamental political concept in the context of "*Pax Romana*" (Brauch, 2008).

Security is a concept that starts individually but covers all systems. Even though it has changed shape according to time, events, and facts, it has always maintained its importance and place in the international arena. The priority for states is to protect their security. However, in the changing and developing World, the ways and forms of maintaining security are constantly changing (North, 2007).

The concept of security is used in several areas of international relations. These are the security of the international system as a whole or in part, the security of geographical or functional sub-systems, regions, or the state, the security of society, or the security of the individual. In national and international security, we encounter three basic elements. These are ensuring national security, achieving national goals, and determining defensive action styles (Leffer, 1992).

In recent years, the most popular security field in the field of international relations is international security. With the change of balance in international relations, the understanding of national security, which has been seen as more important by the majority for a long time, has begun to change and the concept of international security has begun to be seen as more important. This situation has caused changes in the definition and scope of the concept of security. Security has moved away from being the individual problems of countries and has begun to include other elements of national power (Morgenthau, 1970).

Developments in the new concept of security, especially in the 1990s, have shown that the definition of the concept of national security needs to be changed. It has been understood that especially environmental and demographic events should be included more in this definition (Buzan, 1991). Especially after the Cold War period, the concept of security not only became more complex but also became a multifaceted concept. When defining the concept of security, it is necessary to do it in a more holistic way. This term needs to be examined from every angle, from micro to macro. It is necessary to consider how threats can pose social aspects of security.

The most important consequences of climate change are becoming more effective as time goes by. The effects of global warming continue to increase in the World, especially in recent years. These effects do not consist only of environmental factors or the environment or meteorology but also the security issues, as mentioned in the previous section. At the same time, the "security issue" has begun to become a priority for countries.

The United Nations Security Council convened to address the issue of global warming. Many countries took a role at the meeting titled "Energy, Security and Climate". The points emphasized in this meeting are important. Issues such as the negative effects of global warming on international peace and security, countries should be united in the fight against this issue, important resources such as water, energy, and soil, as well as the ecosystem will be negatively affected by this situation, have been discussed, and it has been predicted that the number of immigrants will increase significantly in some countries (Freidberg & Hunt, 2018).

Many researchers have published research and articles supporting these issues discussed at the United Nations Security Council. In his study published in 2001, Barnett argued that environmental degradation would further trigger existing hostilities and therefore cause military conflicts (Barnett, 2001). In another study, it was stated that due to the effects of climate change and global warming, the differences between developed countries and developing countries will grow further and turn into depth, and for this reason, undeveloped and developing countries will militarily confront developed countries and demand equal use of the resources on earth (Homer-Dixon, 1999). Many researchers have argued that many factors related to climate change will cause problems in the field of security in the future. They stated that security threats may increase, especially in issues such as water resources, sea level rise, agricultural activities, and urban infrastructures. Apart from researchers, the European Commission's report on climate change and international security in 2008 focused on human security. It is stated that human security and the impact of climate change on international security are closely related to comprehensive political reactions (European Commission Report, 2008).

As can be seen from the examples, the concept of security, which was used to define political or military threats in previous periods, is not limited to this present definition and has expanded.

In particular, there are 5 security sectors that Buzan focuses on in his article "New Patterns of Global Security in the Twenty-First Century". Analyzes of these sectors will be included in the next section. Although these sectors are interconnected, examining them separately will provide a clear way of expression. At the same time, Buzan stated that the components of the state can be considered as a security issue alone, but they are interconnected, and when examined together, the connections between them are a productive insight into the national security problem (Buzan, 1991).

### **Types of Security**

To understand security, it is necessary to examine this concept in different areas. It is important to examine these different areas under five subheadings and discuss them in the context of human rights. In this section, the classification of security types is based on Buzan's analysis of "New Patterns of Global Security in the Twenty-First Century". The five sectors mentioned are political, military, economic, environmental, and social sectors. These sectors do not work in isolation from each other. Each sector is strongly connected to each other (Buzan, 1991).

In the first part, the military sector appears as a highly institutionalized area of the securitization process. This structure may vary from state to state. In Western European states, this situation manifests itself against existential threats. In this case, states use their military sector and structure more in political and economic roles. For example, Denmark's participation in peace organizations in Africa has nothing to do with its own existential threats and is more related to the political sphere. For some governments, this situation makes those who challenge authority figures unarmed or use counterforce insecure (Buzan, 1991).

In European states, the idea of functional separation of military forces from the police is still shallow. This situation contrasts with the fact that in feudal states the right to use force existed at more than one level of society (Watson 1992). The fact that citizens have the freedom to bear arms in the United States, unlike European states, shows that it has deviated from the Westphalian ideal (Deudney, 1995). Likewise, it is seen that armed citizen elements are preserved in examples such as Switzerland and Israel.

States have become the primary reference objects of military security. Protection of the territorial integrity of the state is the traditional object of military security. Most of the subsystems in this sector are geographically compatible, which enables them to form

security complexes. Some regional organizations and some general principles of the international community can be seen as reference points of the military security sector. This situation usually occurs as a result of the dissolution of states. When states disintegrate, these small regional organizations can be the primary actors in military security. But the one rule to keep is that there is little uncertainty about the securitization of primary actors. These actors cannot carry out the securitization action directly, but they play a facilitating role. Geographical, historical, and especially political factors are also the actors that manage the securitization process. They determine how and in what way this process will proceed. After a long period, there is a shift towards the priority of military and regional security dynamics. Although military insecurity policies among local states decrease or disappear to a certain extent over time, military security sectors at the local level continue to persist in regions dominated by weak or failed states, with the formation of micro-regions of insecurity. Hobbesian anarchies can be given as an example of this situation (Buzan, 1991).

The main conclusion in this case is that the military security sector is still dominated by regional security dynamics, but in weak states local dynamics are likely to increase. The question of whether these local dynamics will create a major disruption in the international system is still being discussed (Kaplan, 1994). However, the logic and theory of the classical security complex still remain largely valid for the military security sector.

The most immediate security threats are seen in the military sector, and these threats can affect every security type. At the same time, the most fundamental feature of a state is to protect its citizens, and this protection may become questionable in the presence of a military threat. This threat can be of different sizes and shapes, and this makes military security a sector of the same nature. On the other hand, political threats, like military threats, create concern for a state. However, compared to military threats, understanding political threats and taking precautions may be more complex and difficult to understand (Buzan, 1991). Some political security threats may threaten the existence of the state itself. In this case, the current political threat can also be interpreted as a military threat. As mentioned, the ability to distinguish between competition between ideologies or a threat directly targeting the nation and other types of political threats is also important (Buzan, 1991).

A second type, the political security sector, is closely related to the organizational stability of social orders. The main idea in this sector is to eliminate threats to state sovereignty. Since these threats can also come from a military perspective, this section will focus on non-military threats, apart from the threats examined in the military sector.

It would be healthier to examine the type of political security under two main headings. The first of these is non-military threats against political units outside the state. Secondly, it is the defense of political security in the dimensions of international society and international law. The most important of the areas that can be included in the second heading are human rights and the demands of individuals directly. This is the primary position of the political security type, which also includes security at the individual level (Deudney, 1995).

The problem with the political security type is that it is the largest sector and therefore has become a category. In this sense, it can be said that security is political (Lemaitre, 1989). In this sense, the act of securitization is also political. As a result of this, other types should actually be examined under subheadings such as political-economic security type and political-environmental security type. If a threat to the organization of a state is directed at the identity of that state, this situation emerges as an issue that concerns the field of social security. If this threat occurs in a military way, it is categorized under the heading of military security type. This is the same for economic or environmental types. Therefore, the political security type applies to threats that are not included in the subheading of these sectors. For the same reason, the features of the political security type are actually open to interpretation as general security features (Buzan, 1991).

In modern state systems, the situations of knowing or not knowing each other are equal in terms of political recognition. Situations of official political inequality, especially internationally, rarely occur recently. In the past, for example in the Middle Ages, it was considered normal that there were more diverse statuses regarding political security and that the political security sector had a more complex structure. The problems encountered are generally related to knowing each other, stability, and legitimacy, and the basic formula for survival in this field is economic and social success.

There are many bilateral political security structures. Although the situations that create this connection are regional, it is also possible to talk about their global role. Because, even if it is regional, it can be based on global theories and establishes strong ties between

regions. These binary connections are not completely separated from other security types, as explained above, and this includes small entities that can also form sub-complexes. But eventually, these small complexes are connected to larger complexes, they do not form a different complex on their own. For example, the territorial disputes between Malaysia and the Philippines pose a threat to Association of Southeast Asian Nations (ASEAN), and the fact that other Association of Southeast Asian Nations countries have taken action due to this dispute is an indication of this. At the same time, regionalization of bilateral or tripartite issues is also a common situation. Countries with the same regime type take positions in line with their principles, and the conflict may tend to become globalized, as seen, for example, in the case of Iraq and Kuwait. This situation may involve many countries. However, since they have only a regional concentration in line with the principles of the countries, they carry local conflicts to a certain level (Buzan, 1991).

Thirdly, the economic security type appears as a type that tries to distinguish security and non-security elements by considering the main sources and positions in economic efficiency debates. The idea of economic security is not fully resolved and is based on highly political debates about the international economy regarding the nature of the relationship between political structures. Besides this factor, economic markets are also a big influence in the discussions. It is possible to see this effect clearly. During these discussions, the debate over whether the state and societies or markets should have priority comprises a considerable topic. At the same time, how private economic actors should participate in the market's decision is another important topic of discussion. While mercantilists and neo-mercantilists bring politics to the fore in these discussions, they see the state as an institution that prioritizes political and social goals and creates the safe environment necessary for the functioning of the market. According to this idea, economic security has a large share in the importance given to national security.

Liberals, on the other hand, state that the economy should be a part of the social structure. At the same time, they argue that the market should operate freely without government intervention. This situation is actually a view that puts the economy at the forefront. According to liberals, the state is necessary to ensure legal and political security. The main purpose of economic security is to develop the rules that create mobility between national economies, and this is an indicator that liberals and capitalist elites have strengthened their place in the economy. Again, according to this view, liberals

view economic security as a positive-sum and mutually beneficial structure (Buzan, 1991).

On the other hand, socialists, unlike liberals, argue that the economy is the basis of the social structure and that the duty of the state is to use economic parameters while ensuring justice and equality. Here, socialists' security focus is on the economically weak, and this encourages them to stand against the economically strong. In this respect, socialists, like mercantilists, attribute great power to the state in the field of economy, albeit for different purposes. Many socialist states have used strict economic control mechanisms for social transformation projects, and this has pushed these states to pursue economic nationalist policies (McKinlay & Little, 1986).

It shows that the economic security discourse is largely dominated by liberals due to the gaps in the practices used by socialist and mercantilist economies. The rise of liberal views has led to increased concerns about instability and inequality in contemporary discourses on economic security. In particular, the concern about instability has raised questions regarding the decline of the United States as a hegemon. This situation is due to the liberalization of the World economy associated with the resulting national and international governance problems. On the other hand, concerns about inequality raise questions about the role of the state and the disadvantaged economic positions of third-world countries. The situation of third-world countries stems from their economic position depending on their suppliers of goods, especially those arising from the colonial period. Another consequence of this situation is that the development of these states is hindered, or they are placed at a disadvantage, both economically and socio-politically. Although these countries seem politically independent, they have influence on foreign policy and foreign market issues. As a result, its traditions and resources remained in a structure that was not suitable for the development of a modern political economic structure (Galtung, 1971).

Under liberalism, economic security is seen as a difficult issue due to the nature of economic relations. This difficulty is related to the distrust in the market relations of economic units and the relationship of economic activities with other sectors. It is difficult to discuss the continuity of economic security in itself, without any other factor. Economic security is often seen as part of political-ideological debates. Economic activities trigger survival problems for all countries. Other sectors are closely related to

economic security, sometimes based on successes and sometimes failures. In fact, most of the issues mentioned are not on the basis of economic security but on the basis of other sectors. Therefore, it would not be wrong to say that economic security has a blurry structure. But this definition is not entirely accurate. Given liberals' desire to separate the economic sector from politics, it is no coincidence that many of the security-related cases of economic liberalism arise in other sectors. In this way, liberals can protect the visible parts of the insecurity encountered in the economic sector, but when viewed from a broader perspective, security problems will be revealed.

Another type, the social sector, has the political and institutional state as its focal point, and in this respect, it is above the political and military security sectors. It is necessary to mention that there may actually be another sector in this field when viewed from the national perspective; social sector security is very closely related to political security. This closeness occurs especially in terms of the ideologies of the states and the elements that give them power, as well as the organizational stability of the state. However, this does not mean that there are no differences.

State and social boundaries are different from each other. In these cases, differences may arise from the differences between the state and society of the "same" people. For example, ensuring the security of people of different ethnicities, even if they are citizens of the same state, is more related to the social security sector than the political sector. Because, while the state is based on a fixed territory and formal membership, social integration is a much deeper phenomenon. This phenomenon can be seen at the micro or macro level. At the same time, the key to society in international security analysis is to categorize individuals according to their social group memberships. The reason for this way of categorizing is that individuals form their identities through the social groups they are members of. Fundamentally, this is about individual identity perception and belonging. These identities are regulatory. Social distrust arises when a society perceives that development potential is a threat to the survival of the society. For example, in modern European societies (Wæver & Others, 1993), the concept of identity is mostly national. However, in some cases, especially when sub-identities are involved, these groups may have more religious or racial importance. As a result, categorization is related to "identity security", even if it varies from society to society.



It is important not to confuse the two terms mentioned above. Societal security and social security are not terms that can be used interchangeably. The concept of social security is individual and is also closely related to economic parameters. On the other hand, the concept of societal security is more social and related to collectives, but also, as mentioned, is closely related to identities. What should be noted is that the concept of "societal" used here is used to indicate larger populations in daily life.

The Societal security agenda is determined by different actors in different historical processes and periods. The most common problems in this area are migration, horizontal competition, and vertical competition.

If migration is explained through the defined concept of identity, it is the invasion of a society by people or groups belonging to another society, affecting the identity of the group existing in that region. Society is a variable phenomenon; it changes over time and with external influences. As a result of such an invasion, the existing society cannot be expected to remain unchanged. For example, the migration from China to Tibet or the migration from Russia to Estonia. Another concept, horizontal competition, is when the society living in that region changes its ways due to the dominant influences of the neighboring society, such as cultural elements or language. An example of this situation is Canada's fear of Americanization. Finally, vertical competition is the attempt of a society to give up or change its identity through an integration or "regionalist" project. Examples such as Yugoslavia and Kurdistan can be included in this group.

These threats are practically combinable threats. At the same time, these threats can be intentional and programmatic, or they can occur unintentionally. For example, as mentioned above, China's deliberate move to Tibet for a political purpose such as homogenizing the society, and individual people's decision to migrate due to economic opportunities or due to their freedom have the potential to be a threat, although they are fundamentally different.

Integration projects, regardless of whether they are democratic or imperial, may try to control the reproduction mechanisms of society and the mechanisms of pressure on society may become stronger. In this case, minorities may have difficulty in maintaining their own culture. For this reason, social security problems will have an impact on the phenomenon of identity. Societies can react to these situations in two different ways. The first of these is to move the issue to the political sector. Controlling the migration threat

through legislation or border controls is an example of this situation. Such situations are difficult to analyze because they follow a path away from the social sector and towards the more political sector. Another way is to handle the situation in a non-state way. Certain strategies are determined to try to survive as a separate culture, and minorities can be an example of this situation. This subject will also be discussed under different headings.

One of the last and most important security sectors to be mentioned is environmental security. While some researchers define environmental security as "ultimate security" (Myers, 1993), others consider environmental security from a political and military perspective (Homer-Dixon, 1991). While examining the environmental regime and its studies in the previous chapters, it is possible to see that the studies carried out on this subject are more politically or socially based. However, in the field of environmental security, especially when it comes to the security of environmental values, a shorter history can be mentioned than the other four sectors mentioned.

One of the most important features of the environmental security sector is that it progresses through two different agendas: scientific and political agendas. The scientific agenda is produced by scientists, with natural sciences being a priority, away from the political agenda. This agenda is the most important and closely followed in presenting the list of environmental problems. On the other hand, the political agenda represents public policies and public decision-making on how to deal with environmental concerns, whether by governments or intergovernmental. There are also situations where these two agenda models work together and overlap. For example, the state and public opinion take shape in the light of issues on the scientific agenda. At the same time, the existence and importance of the scientific agenda means that the political agenda cannot remain indifferent to scientific developments and the agenda. The scientific agenda emerges when security threats are evaluated by authorities. The political agenda refers to the public sphere of the evaluations created thanks to the scientific agenda. It is the process of anxiety and the steps taken against these concerns. For example, as was seen during the United Nations Conference on Environment and Development (UNCED) held in 1992, the political agenda is interested in the more important parts of the scientific agenda. Environmental issues may be less visible than other agenda items. The reason for this is that environmental issues are included among other issues. But in all cases, the scientific

agenda is important in determining issues, regimes, and policies. The political agenda politicizes environmental problems. This situation constitutes politicization rather than security, and when environmental concerns remain outside of economic and political factors, the need to emphasize the value of this issue arises (de Wilde, 1991). It is also possible to see this situation in daily life. For example, many securitization moves can be seen, from Club of Rome reports to the work of the Brundtland Commission. The factor that creates securitization here is satisfaction, not disasters (Carson, 1962). This situation attracted the attention of the public and made it successful.

The environmental safety sector appears complex due to a variety of issues. But even in this state, it benefits from it at many points of the scientific agenda. This utilization aims to create a road map within the framework of environmental security - affecting many security sectors. Issues where the scientific agenda and the environmental security factor overlap are issues such as the degradation of ecosystems, energy problems, food problems, and economic problems. The degradation of ecosystems is closely related to issues such as deforestation, erosion types such as desertification, and forms of pollution, which primarily affect society. Regarding energy problems, it includes problems that may include political issues such as depletion of natural resources, types of pollution that may arise from management styles, population problems, and migration. Food problems include impoverishment, famine, overconsumption or related diseases, water shortages, epidemics, and unequal distribution. Finally, when economic problems are examined, asymmetries and unequal distributions, along with unsustainable production methods and social instability, attract attention again.

Although some of the situations mentioned above do not create insecurity, many of them create high levels of insecurity. At the same time, it is clearly seen that these problems concern one or more sectors. For example, the issue of ecosystem degradation is the largest issue that affects every security sector and also occupies both the scientific and political agenda. However, even if the perspective of the environmental security sector and the social security sector overlap, it is difficult to look at this situation from the same perspective. At the same time, not only the difference between sectors but also factors such as countries and development level play a major role in this regard. When examined using the same example, it can be said that European states focus on this issue in terms of

population, while developing states have an economy-oriented perspective on this issue (Porter & Brown, 1991).

One of the important points about the environmental security sector is that the system level predominates. This is due to the existence of an international community that prepares and secures environmental security. The political power of this community is limited, which makes it important to separate the environmental agenda from the political agenda. While the community engages in scientific agendas, public spaces, and high policy agendas are created locally. What is necessary for environmental security is that states and local communities embrace the scientific agenda. It is a successful securitization that concerns the political dimension. It is important not only to improve the environment but also to stop political turmoil and ethnic conflicts in the field of environmental conflicts. Regional subsystems are of great importance in this field. It is also important that these systems are not global. This is because there are different problems in many different areas. For example, it is the emergence of problems that may vary regionally and are interconnected with each other, such as water problems, soil problems, and deforestation. Even if the problem is similar, different actors and those who suffer from it are different in different regions. For example, different actors may come into play in two different regions regarding agricultural policies in arid or semi-arid regions, and solution suggestions or paths may differ and go through different processes. At the same time, in case of any failure, the population living in this region may become environmental refugees due to different situations such as economic or food problems due to crop failure. Situations like this led to larger and more complex security connectivity patterns. In summary, although moves regarding environmental security are considered in a global context, the most valuable moves are the measures and practices taken in local units.

### **Environmental Security in the EU**

Recent climate security calls are a successful attempt to bring environmental concerns onto the security agenda. The relationship between environmental change and security remains controversial.

Environmental problems began to come to the political agenda in the 1970s. Starting from these years, many suggestions and ideas have been put forward regarding the necessity of taking security-related consequences into consideration (Selchow, 2016). As days passed,

the seriousness of the situation began to be understood by the public, along with scientific studies. This situation, especially as a result of the studies carried out on the ozone layer in the 1980s and as global warming began to emerge more concretely, environmental security discussions were moved to a more serious platform. The term environmental security was included in international discussions with the book "Our Common Future" published by the World Commission on Environment and Development in 1987 (Soroos, 1994).

When environmental security was first seriously discussed, it meant warning society about important issues and bringing environmental problems to the political agenda. Many different opinions have emerged during the discussions on the political platform. While some argue that environmental security is related to solidarity, others have advocated a different perspective, thinking that it is associated with environmental change and concepts such as ecology and globality (Thompson, 2016). Although these discussions continued with ups and downs, after a while this concept gained popularity. Especially in 2007, the effects of climate change on security were discussed by the United Nations Security Council and brought to the international platform (Sindico, 2007).

The countries that have the best experience in solving environmental problems and environmental security are European countries. The European Union's environmental policy has been planned in a different and international way to solve environmental problems. Firstly, when the environmental policies of European countries are examined, the Declaration on the Protection of Birds was accepted by Austria-Hungary and Italy in 1875, and then the first international Agreement on the Protection of Birds Useful for Agriculture was signed in Paris in 1902 by many European countries. In the present, there are more than 140 international organizations working on the environment in the European Union countries. The European Union's environmental activities can be examined under five main headings (Kachuriner, 2013).

The first period, between 1957 and 1972, is the period when communities began to form, but especially the solution of environmental problems had not yet been addressed. It also draws attention to the period when the integration of Europe began with the acceptance of the Treaty of Rome in 1957.

The second period, between 1972 and 1986, is the period when environmental policies began. This issue came to the fore with the onset of environmental degradation. Within

the framework of the European Union, decisions have been taken to take steps towards developments in the field of environmental protection. During this period, the idea of establishing international environmental cooperation also came to the fore. During the same period, improvements in quality-of-life standards began to occur in the European Union and other countries. Internationally, many countries and societies have begun to realize that countries need to take action together in line with common interests and that stability can only be achieved by taking action together (Kachuriner 2013).

In 1973, the first community action program on the environment was adopted. This program, seen as the evolution of the European Union's environmental policy, has created a favorable environment for the establishment of a real political basis. It also has a significant impact on the production of similar programs and policies. The process that started with this program paved the way for the production of a total of seven programs on environmental policy (Bizek, 2013).

The third period covers the period between 1986 and 1992. During this period, the European Union continued to work on the completion of its environmental policies. The objectives and principles of environmental policies have been determined. The Maastricht Treaty is one of the important developments in this period. This agreement, which determines the common powers of the member states of the European Union, also regulates the relations between the Community. During this period, measures were also taken to establish environmental certification, monitoring, and financing mechanisms and to protect environmental rights (Volger, 2002).

The fourth period covers the years 1992 and 2001. The main feature of this period was the horizontal approach to industries that caused pollution. Changes were made with the Amsterdam and Nice Agreements, and for the first time, the European Union's principle of development based on balanced environmental management was revealed (Gusev, 2012).

The fifth period covers the period from 2001 to the present. With the Laaken Declaration at the beginning of this period, the future of the European Union showed the desire to move towards taking more practical measures in the reform and development of environmental strategies. The action program of the European Union on this issue includes urgent measures, especially in the near future. The sixth Community Action Plan 1600/2002/ES1, which came into force in 2002, came into force. The importance of this

program is that it has a legal status. The conditions of the European Union environmental measures, according to this plan; integrate environmental requirements, implement the European Union ecological conditionality principle, continue sustainable development plans, and continue to take environmental measures. Not only the European Union member countries but also the candidate countries have been asked to take precautions in this field. Although this plan ended in 2012, the decisions and practices taken in this field continue. The seventh action program came into force in 2013. Within this action plan, measures on issues such as climate change, biodiversity, and health have been expanded (Prokhorenko, 2012). The aim of this program is for European Union member countries to reduce their "ecological footprint" by 50% in the next 20 years. Laws covering issues such as environmental information collection, assessment of environmental impacts, and financial mechanisms have been updated (EUR-LEX - 32001L0042 - EN - EUR-LEX, n.d.). Governmental and non-governmental international expert organizations work in this field.

In the last decade, especially in Western and Central European countries, the measures taken to protect the environment and the increase in environmental awareness have led to an improvement in the environmental situation (Pugachev, 2014). On the other hand, the activity of northwestern and central Europe in the last two decades has led to an improvement in the environmental situation. At the same time, this situation is closely related to whether countries have sufficient resources and tools to carry out the environmental policies they set, or target, and European countries have these tools and resources. It is known that the Central and Northwestern European countries have improved environmental indicators across the European Union in the last 20 years. These countries have sufficient financial resources as well as mechanisms developed to protect nature. These countries still have an active role in the application of environmental technologies and even in the prevention and reduction of international pollution. As evidence and example of this situation, the Center for Environmental Policy and Law, affiliated with Yale University, is among the top 50 of 28 European Union countries within the scope of the environmental effectiveness index it prepared. While preparing this index, not only statistics were taken as a basis, but also national and international organizations were taken into account (Tenente & Others, 2020).

Considering all these developments, the main aim of the European Union in environmental policies is to find the most effective and least costly economic instruments and use them. In this context, it is known that seven important plans have been accepted so far. It found methods of efficiency, joint planning, and joint evaluation and used them as the legal basis to derive principles regarding investment and competitive conditions. An example of this is the polluter pays principle (EUR-LEX - 32013D1386 - EN - EUR-LEX. (n.d.)).

The European Union is in a leading position in the World in terms of environmental development, especially considering the last 50 years. The reason for this is that environmental strategies have progressed in a more established and legal order, especially during the mentioned period. At the same time, the European Union also plays an active and important role in environmental protection activities developed within the framework of the United Nations.

### **Human Security in the EU**

Climate change poses risks to the basic needs, basic values, and human rights of individuals and societies, and these risks pose threats to human security gradually. The reason why this threat is increasing over time is that by the end of this year, the warming level will be 4 degrees Celcius higher than expected compared to the pre-industrial period (Anderson & Bows, 2008). Even in cases of warming that is 2 degrees Celcius higher than pre-industrial levels, water scarcity in some regions, a decrease in agricultural productivity, water level rise in coastal areas, and an increase in death rates due to epidemic diseases are expected (AR4 Climate Change 2007: Synthesis Report — IPCC, 2007).

These changes create concerns, especially on social systems. The reason for this is that humanity has not experienced changes with such effects since its existence. This situation increases thoughts and concerns about security. The European Union and the World Bank have recognized that climate change is a security issue. The United Nations Secretary-General stated in his report that climate change increases human fragility. The report states that climate change delays economic and social development, may increase conflicts over migration and resource competition, and threatens security by straining international cooperation mechanisms (Secretary-General, 2009).



Pacific Island Countries have long identified climate change as a security issue. They say that climate change, which they see as the biggest problem of the time, not only affects the economic situation but also strains and endangers the viability of some communities (PIF, 2009). Many international non-governmental organizations have also initiated studies on this subject and directed their researchers to this subject (Busby, 2007).

Historically, national security and human security have been considered separately from each other. National security is often included in the previously mentioned military and political security issues. Human security indicates the ability to manage the pressures on the needs and rights of people and communities. At the same time, there are researchers who see security as what states do to protect themselves from violence (Barnett & Others, 2009). This shows that security is valid for people as well as states and that people's insecurities involve different processes, such as the security practices of states. This situation is important for human security as it envisages the expansion of security theories. Theories up to now also show that human security can be more important and stronger than the security of states (Booth, 1991).

The Human Development Report, published in 1994, included human security among the development elements and defined human security as "concern for human life and dignity" (UNDP, 1994). According to this report, the economic, health, environmental, and political components of human security are more clearly identified. According to another definition, human security is defined as protecting the essence of human life in a way that improves human freedoms (Commission on Human Security, 2003).

Considering the definition of human security given above, it is possible to talk about strong and weak criteria for when climate change has or will pose a risk (Von Bogdandy, 2000). In the strong case, more than one of the needs and rights of a group or individual are affected simultaneously due to climate change. This situation creates vulnerability in individuals or groups. At the same time, this fragility can also symbolize the potential for loss. This concept is a concept that exists not only in the global warming dimension but also in other areas. While IPCC defines this vulnerability, it is defined as the level of sensitivity of a system to the negative effects of global warming and climate change and its inability to cope with this situation (Parry & others, 2007). The mentioned fragility has three factors. The first of these is the level of exposure to climate change. The second is the level of sensitivity to climate change. Finally, the third factor is the capacity to take

action to minimize the negative consequences of climate change. Another important issue that is not included in these three factors here is adaptation. The meaning of adaptation in this context is measures taken to reduce vulnerability to climate change. At the same time, this issue was mentioned in the IPCC report as mitigating the damage caused by climate change and evaluating beneficial opportunities (Parry & Others, 2007).

Human security is defined as meeting basic needs and human rights as well as basic values. Therefore, it is of great importance to determine how and to what extent global warming poses a risk to people's needs, human rights, and basic human values.

There are also many researchers who are critical of human security due to climate change. For example, O'Brien argued that climate change is fueled by inequality in political and economic processes and that this inequality will increase over time. At the same time, when using the term human security, he emphasized the risks that have been ignored until now, saying that it would affect people in developed and developing countries (O'Brien, 2006). Again, "the Global Environmental Change and Human Security Project", the study carried out by O'Brien and Leichenko in 2008, gained an international dimension by attracting the attention of states, and human security was included in the 2009 session of the IPCC general assembly and the fifth evaluation report (Matthew & Others, 2009).

After the issue of human security began to be included in studies on climate change, some particularly critical approaches have emerged. Critical approaches to studies on climate change and human security are generally about focusing more on issues such as greenhouse gas emission reduction efforts, economics, decision-making mechanisms and processes, rather than people's needs, human rights, and values. There is no time left to focus on institutions and focus on human security and values (Adger & Others, 2010). The situation is the same when it comes to adaptation. By focusing on human rights, needs, and values, sensitivity should decrease and adaptive capacity increase.

In the criticisms made about climate change and global warming research and human security, there is also the idea that all people are affected by climate change, but this will not happen to the same extent. This issue can be perceived as correct to some extent. Some people will be more affected by this change, depending on the geographical region they live in. Inequality in risk distribution may create a perception in people that they are not equally responsible for climate change. At the same time, in this case, it is thought that people who are more economically superior will be less affected by this change and

are more responsible for this issue, and this triggers the perception of injustice. This issue is also supported by some studies. For example, in a study, people living in developed countries with the highest economic income levels produce 155 times more greenhouse gases than the poorest 10% in developing countries (Baer, 2006).

Research on climate change and human security has yielded valuable information in many areas such as famine and food security, social vulnerability to disasters, desertification, and sustainable resources. There are also studies on affected groups and individuals. For example, information was provided in many areas such as women, the urban poor, intergroup conflict, and diseases. All these studies provide valuable examples in areas such as human rights and needs and can change the actions that can be taken and the course of programs to be planned (Messer & Others, 2001). At the same time, one of the general conclusions to be drawn from these studies is that those who will be most affected by factors such as climate change are people or groups who are already insecure. They have few resources to be affected by risky situations that may occur concretely and to compensate for these risks and manage the process (Adger, 1999). When considered in terms of managing risks, the extent to which people depend on natural resources is of great importance. Especially if it is dependent on such non-renewable resources in terms of economic and social capital, it may be directly affected by the risks caused by climate change and global warming (Peluso & Others, 1994). In this case, there is a high probability that women will also be harmed due to gender-based division of labor (Enarson & Morrow, 1998). Elderly people, except for women, are included in this group due to their health conditions and marginal groups tend to be more low-income (Hewitt, 1997).

Another problem related to insecurity and the international community due to climate change is large-scale migration. With the effect of global warming, individuals can migrate to protect their rights and values and to meet their needs. This situation is thought to increase not only with the effect of global warming but also with the effect of global warming.

It is inevitable that new metrics will emerge to focus on climate change in human security and to scan or monitor policies in this field. The inability of individuals or groups to reach or prevent them from reaching their needs, rights, or values, implementation of policies

that increase the level of insecurity, or failure to take action to slow down climate change makes it difficult for individuals and groups to live where they are.

It is known that global warming will force many people to leave their villages and cities in the coming years. It is thought that this situation will primarily affect millions of people (Myers & Kent, 1995). Since this situation is future-oriented, their numbers are not known, but they are estimated based on scenarios, expected results of the research conducted, and the literature. Many climate refugees may choose to relocate within their own country. However, others may leave their home country to find a new, safe area. Although this crisis can be prevented, especially in developed northern countries, by adaptation methods such as strengthening works on coastlines and water supply methods, climate migration may be the only option because many poor countries cannot implement adaptation methods or do not have sufficient resources for this. In this case, the need for protection and support from international communities will increase (Myers, 2002).

International governance comes to the fore in cases such as the recognition, protection, and resettlement of climate refugees. Due to the lack of literature on systematic migration in this field, there is also a lack of conceptual clarity and consensus. The main problem hindering research on climate refugees, especially comparative research programs, is the lack of conceptual clarity and consensus. Most of the research carried out so far has been carried out by the United Nations Environment Program (UNEP) (El-Hinnawi, 1985). In these reports, climate refugees are defined as people who have to leave their living spaces temporarily or permanently due to significant environmental degradation that endangers their existence and affects their quality of life, but this definition was obtained by combining many different sources (Bates, 2002; Myers, 2002; Kent, 1995). Although there are different definition efforts other than this inference, this definition has been avoided in many studies. For this reason, terms such as 'migrants' and 'displaced persons' have been suggested to governments and intergovernmental bodies (Bell, 2004).

Organizations such as the Organization for Migration (IOM) and the United Nations High Commissioner for Refugees (UNHCR) do not seem to have a positive approach to a privileged definition specifically regarding climate refugees, due to the legal rights currently granted to refugees. The current concept is limited to the Geneva Convention Relating to the Status of Refugees in 1951. International organizations that want to change this situation add the phrase 'environmentally displaced persons' to their definitions in

addition to the aforementioned definition (Keane, 2004). Again, in this field, UNEP created the concept of environmental refugee with the studies it carried out.

Recognition of the concept of climate refugees is considered important for two reasons. Firstly, the refugee definition created in 1951 contains phrases that do not fully cover climate refugees. Due to climate change, the existence of some countries, especially island countries, is completely threatened or there are losses of large land masses, and for some countries, there are situations such as drought. Therefore, it is estimated that there will be serious pressure on the countries where these disasters are expected to occur. While many people can cross country borders, some people will have to relocate within the same country. This situation will create great pressure on those countries. The lack of a global governance mechanism for the protection of these people is especially important regarding the status of people displaced within the country and giving them a different term. Secondly, the term refugee is a more general term as it was used in 1951. Adding the phrase 'environmentally displaced persons' to this term and modifying it by making a few specific changes would be healthier, especially in terms of protecting refugees who have to relocate due to environmental reasons and making faster and more useful decisions about them. For example, combining the displacement of a person whose whole or part of the city they live in is underwater and two individuals who relocate due to political persecution in the same definition will facilitate both the needs of the two individuals and the procedures in the place of migration. Combining these two people under the same definition does not benefit either those individuals or the bureaucratic procedures of that place (Kettle & Dow, 2016).

Another international issue that also needs to be discussed is that human security has seven basic components. These components should also be included in the definition of climate refugees. The first of these seven components is economic security. This includes displaced persons having an income and employment. Secondly, food security, especially having basic food needs. The third element is health safety. This type of security includes protecting individuals from diseases and meeting their health needs when necessary. Another element is the environmental element. It includes protecting individuals, especially providing human needs such as drinking water and clean air, protection from natural disasters, or preventing environmental degradation. As the fifth element, personal security emphasizes the protection of the individual from physical violence from state or

sub-state actors. Sixthly, community security refers to the protection of ethnic and sectarian identities, and political security, as the seventh element, refers to the protection of individuals' fundamental rights and freedoms (Kerr, 2013). These elements serve as a guide not only for the definition of refugee but also for taking action for the future. Concerns for the future show that different problems should be considered not only within the framework of these definitions. Actions need to be taken not only on excessive international migration but also on issues such as uncontrolled population growth, inequalities of economic opportunities, and international terrorism (Newman, 2001).

### **The Intersection of Environmental Security and Human Rights in the EU**

The 1972 Stockholm Declaration and Conference is seen as a first step for the legal initiation and recognition of the interaction between human rights and the environment. Although the two fields seem to be separate, their dependence on each other has increased significantly, especially in recent years (Knox & Pajan, 2018). To examine, in the first article of the Stockholm Declaration, a person must have a quality environment and quality living conditions in order to live his life in dignity and prosperity. The necessity of protecting nature for current people and future generations has been emphasized (United Nations, 1972). In fact, although environmental law and nature issues and the human issue for human rights are considered separate from each other, in the present there is an increasing debate that these two issues are related to each other. The basis of this discussion started with the fact that human need ecosystems and ecosystems need human. Human and nature are inevitably dependent on each other. This approach removes nature from being a concept in the service of human and turns it into a subject. With this approach, the foundations of a holistic perspective have been laid. This perspective has created the idea that nature is fundamentally connected to human and that when they harm nature, human actually harm themselves (Rothenberg, 1989).

As analyzed in other chapters, research on the degradation of the natural environment is at alarming levels. There are also many legal studies published regarding cases where human rights and the environment intersect. Two examples selected from these cases will be examined in the next section. However, it is known that the courts have limited intervention in meeting the need for better protection of the environment, although there are exceptions. At the same time, new human rights views that have been discussed recently are also considered important in this field.

In this context, in 2018, the United Nations General Assembly adopted the Global Pact for the Environment until 2022 (Juste Ruiz, 2020). In this agreement, which was still in draft form at that time, it was mentioned that the need to protect the environment was increasing due to the increasing threats to the environment, and the need to achieve this in a planned manner was expressed. There are many European Union-based or more international-based initiatives in this field. At the same time, regional initiatives are also seen.

Human rights law and the environment are related to each other in many ways. Firstly, when the environmental factor is prioritized, the place of human rights is emphasized in international environmental documents. These documents, which were created by selecting human rights that serve the purpose of protecting the environment, emphasized many rights that can be used for the purpose of protecting nature, such as the freedom of association of non-governmental organizations and the right to be informed about potential threats to the environment. At the same time, rights related to human health and well-being have been talked about substantially (Weston & Bollier, 2014).

A second approach emphasizes and shapes this process by appealing to existing human rights laws and human rights institutions to ensure that they are under threat from environmental damage. It can be thought that it is a human-centered approach. It tries to prevent people's rights such as the right to life, the right to privacy, the right to health, and the right to access safe food and water from being seriously harmed. This approach focuses more on the consequences of environmental degradation on human rights. However, since this approach is a human-oriented approach, it does not include regulations regarding ecological processes and non-human living species, and therefore it can be said to be incomplete.

The third approach on this subject also includes ecological processes. The fact that it is not only human-centered shows that it is a more sustainable approach. The aim of this approach is to reformulate human rights and choose to include only some of them, rather than integrating them completely into the environmental issue. It can be thought that there is a more successful approach in this regard. Another approach that can be considered together with the approach specifically mentioned in this regard is the last approach, which questions the claims regarding the protection of the environment and brings human responsibilities to the agenda. The last two approaches mentioned have achieved more

sustainable success internationally compared to the first two approaches (Shelton, 2012). Various initiatives are ongoing to prepare a draft declaration of human responsibilities, especially regarding the human responsibilities mentioned in the last approach. Both approaches have adopted a more moderate path, giving equal importance to human rights and the environment.

Environmental security has a great role in ensuring the full enjoyment of human rights. The relationship between these two concepts cannot be denied, as people cannot survive in an environment where ecosystems and ecological processes cannot be protected. For example, only 2% of the water on earth is accessible water resources, and any loss of this amount poses serious dangers for future generations. The United Nations Water Council stated in its report that two-thirds of the World's population will face water problems by 2050 and that 26 countries are currently experiencing this problem. This situation is important not only for human health but also because it can lead to serious conflicts between countries (Shelton, 2012). The inaccessibility of water is also a sign of food problems and air pollution. Therefore, it seriously threatens human life. On the other hand, another area that will be affected by these problems is culture. In order to maintain cultural diversity, it is of great importance to protect the cultural values of the communities and the areas they live in.

It is also important to encourage, guarantee, and strengthen certain human rights, such as the right to information, which is another issue for the protection of the environment. Effective adaptation requires awareness of the environmental situation. Moreover, as mentioned, this plays a vital role in preserving cultural values and diversity. In this case, the subject of harm is private companies. It is important that individuals and groups who are or have the potential to be harmed are included in decision-making processes in order to prevent potential difficulties they may encounter. At the same time, public support is also a factor that can be beneficial in this regard. This factor plays an important role in compensating for the damage, in case these actions are not sufficient to prevent the damage before it occurs and people are affected by it, public support and the involvement of these individuals and communities in the decision-making mechanisms.

Accepting human as a part of the ecosystem can reconcile human rights and environmental safety. The reason for this is that sustainable living, especially within the framework of this view, ensures the continuity of the ecosystem and the continuation of



humanity. The main purpose of human rights law is to protect individuals and groups. In addition to this purpose, environmental law also includes the needs of future generations so that future generations can live an equal and balanced life.

Some researchers discuss whether environmental protection can be seen as a human right (Nickel, 1993). It is thought that the low probability of this situation occurring causes efforts for this purpose to ignore the issues that should actually be focused on. In this respect, it values human existence by supporting the protection of human rights, especially the human rights recognized in international documents. Protecting the environment coincides with this value in terms of ensuring human existence and well-being.

Rights regarding an adequate standard of living and working conditions are defined in detail in international agreements such as the European Social Charter and Conventions and Recommendations of the International Labor Organization (Angeleri & Nivard, 2022). States generally apply flexible obligations according to changing economic needs and resources. A similar approach can be applied to environmental rights. It suggests that potential threats to humanity, as well as the precautions to be taken against these threats, are in constant flux. This variability depends on scientific knowledge and advances in environmental conditions. Therefore, rather than clearly specifying what measures should be taken, a human rights instrument can discuss and regulate the measures required to implement the right to the environment within the framework of international environmental norms and standards, based on independent environmental data and rapidly amendable regulations. This approach recognizes that the implementation demands of environmental rights may differ in order to cope with different environmental threats depending on time and place. This does not undermine the concept of rights; On the contrary, it only considers its dynamic character.

Recognizing the right to the environment may involve political risks. Because it is claimed that different conditions will require different solutions and that it can provide an effective legal platform that can carry national decision-making processes to an international level. This is a correct determination. But all international human rights law already addresses the essence of traditional state sovereignty. For this very reason, the content of the sovereignty of states is constantly evolving. Objections to sovereignty or internal jurisdiction have been raised, for example, by Mexico when the Inter-American

Human Rights Commission considered allegations of election fraud, and by South Africa in response to criticism by the former Soviet Union when it addressed the issue of the United Nations' refusal to allow the emigration of Soviet Jews (Goldman, 2009). States have always been reluctant to accept and implement international human rights norms. This has come about as a result of public pressure, especially from non-governmental organizations, who argue that governments' practices towards people should not be exempt from international scrutiny and accountability.

## **EU POLICIES**

Although the European Union emerged for the purpose of economic integration and peace, it has turned into a powerful political actor over time (Asci & Ozturk, 2017). According to international lawyers, the European Union has been defined as "*sui generis*", meaning unique (Vogler, 2011). It is a structure that has developed significantly since its establishment in 1958. Thanks to these developments within itself, it has become a leader on the international platform. At the same time, it is on its way to becoming a global power as it is united under the umbrella of political unification and democracy (Arslan, 2011).

The European Union has strengthened its institutional structure to become a strong actor in the international arena, and its member countries have acted together in the fields of security and foreign policy. The unification of member countries based on their fundamental interests and security policies has enabled the Union to act as a single decision-making mechanism at the international level. The European Union has and respects values such as democracy, the rule of law, respect for human rights, and international cooperation (Arslan, 2005). The European Union, which has a certain prestige internationally with these values, has also influenced other countries with its determined attitude and norms in these areas. The Union is therefore characterised as more than an international organisation but less than a nation-state. The European Union appears as a normative power. The fact that it is a normative power can be understood from its strong stance on international trade, justice, economy, and environment (Sjursen, 2006). The fact that the European Union has a leading role in environmental policies gives it a strong position in the international policy arena. For example, during the enlargement process, the European Union improves the behaviour of the countries that have committed to comply with the principles of the rule of law, democracy, and respect for human rights. It has provided an environment for the member countries to develop their policies within the framework of parallel values. Rational adoption of the European Union identity is formed by accepting and respecting these norms (Acikmese, 2004).

The European Union, which was established with the Treaty of Rome and increased the number of its members with its expansion policy, has become more interconnected by developing policies in many areas since its establishment. One of the important topics of the policies developed is environmental and climate policy. The fact that climate change

is seen as a serious problem by many international organisations and scientific studies, and the effects of climate change, have led the European Union to develop more climate change policies. The European Union has played an active role on the international platform, especially in international negotiations. In this role, it has made significant efforts to ensure the transition to clean energy technologies by succeeding in integrating energy and climate policies.

### **EU Policy Framework on Climate Change**

The European Union works to implement the global climate regime and reduce climate change. The European Union has two big steps in this field. These are the United Nations Framework Convention on Climate Change and the Kyoto Protocol. The European Union has a major role in the implementation of these two agreements (Vogler, 2009). The reason why the European Union assumes this role is to prevent climate change by strengthening security principles and international law. At the same time, another goal is to reduce legal bindings in countries with high industrialization. It is aimed that developing countries do not have to worry about reducing their emissions and continue to develop. This situation is completely unequal, considering the situation of developed countries. Another country that is not affected by this situation is the USA. Although the US is a large oscillator, it does not have to reduce its emissions (Van Schaik & Schunz, 2012).

The European Union has made serious efforts to reduce emissions since the 1990s. As an example of this situation, the decision 93/389/EEC was implemented in 1999 in order to improve greenhouse gas emissions monitoring techniques. This application not only aims to monitor emissions but also shares information from the National Emission Reduction Programme (Pallemaerts & Williams, 2006).

The Commission has implemented the European Climate Change Programme (ECCP) to produce and help adopt new policies with the aim of reducing the effects of climate change. Apart from this application, another application called the Emissions Trading System (ETS) was established to reduce the cost of greenhouse gas emissions. The first trade period started in 2005, and the second trade period started during the Kyoto Protocol

period (Parker, 2006).

The Council of the European Union adopted the report called "Catching Up with the Community's Kyoto Target" in 2002. This report calls for a 9% reduction in the amount of greenhouse gas emissions produced by the 25 European Union member states. One of the steps taken in 2005 was the agreement called "Joint Declaration on Climate Change between China and the European Union" signed between China and Europe. This agreement emphasizes the principles and responsibilities of the Kyoto Protocol between the two parties. At the same time, this is an indication that both parties are taking a sensitive step against climate change. The two sides agreed on technical issues such as the recovery of coal and methane, ensuring energy efficiency and sustainable development, and carbon storage, and agreed on two initiatives, namely "The China-EU Action Plan on Clean Coal" and "The China-EU Action Plan on Industrial Cooperation on Energy Efficiency and Renewable Energies" (Council of the European Union, 2005).

The Council of the European Union took a decision in 2005 in which it determined new strategies to reduce long-term emissions. In this decision, strategies that will increase the effectiveness of the articles of the Kyoto Protocol were determined. In addition to these strategies, the need to take urgent action and raise public awareness was emphasized. The Council emphasized that development banks should provide funding for energy technology projects that are climate-friendly and aim for low greenhouse gas emissions. Another important point is that the need to put additional policies and measures into effect, apart from the report published by the European Union Council in 2002 and the strategies determined in 2005, is also included in the report. In this report, the Council of Europe made a point of the importance of the effort of industrially developed countries to collectively reduce their greenhouse gas emissions and expressed its necessity in clear terms. While the European Union is trying to reduce greenhouse gas emissions with these strategies, reports, and studies in this field, it has also developed a policy that is open to working with different partners in order to develop new strategies and exchange ideas. The aim of these policies is to have a target of reducing emissions between 60% and 80% by 2050 and the desire for other economically developed countries to set this target (The Council of the European Union, 2005).

In 2007, the Council of the European Union put forward an agreement proposal and an alternative regarding what strategies should be determined after 2012, the expiration year of the Kyoto Protocol. European Union leaders, who met in March of the same year, approved a vision that commits them to reducing emissions by 30% below the 1990 emission level by 2020. In May, the European Union Council distributed the cover note containing the conclusions of the Brussels European Council President (8/9 March 2007) to its delegations. The purpose of the note is to call on the member countries of the European Union. The content of the note includes articles such as the necessity of increasing investments, especially in the field of research and development, the importance of qualified employment, the creation of sustainable climate and energy policies, and the development of social unity (Council of the European Union, 2007). They also stated in this note that the European Union plays a leading role in mitigating the effects of climate change and climate protection. They underlined that unity needs to face the challenges of climate change and that negotiations should be initiated to create an effective combat system in the period after the Kyoto Protocol. They emphasized that new technologies should be developed in order to make the global carbon market more effective, the right measures should be taken to cope with the effects of climate change, and precautions should be taken regarding deforestation. It has been stated that every country should behave rationally in the areas where they will succeed and where they wish to assume various responsibilities (Council of the European Union, 2007).

The European Council stated that the largest share of greenhouse gas emissions is caused by developing countries. On this issue, the Council emphasized that the intensity of emissions should be reduced and expressed the urgency of the situation. In this regard, they stated that he would provide climate-friendly reinforcement support to developing countries without hindering their economic development. An invitation was made to increase transparency and improve its scope within the scope of the "European Union Emission Trading Scheme," not only for developing countries but also for European Union member countries (Council of the European Union, 2007). In order to embrace and care about climate change throughout Europe, the Commission has adopted a paper called "Green Paper" that will help and guide the fight against the effects of climate change and will create a policy standard that foresees minimizing the effects of environmental disasters caused by climate change and the material destruction they cause. (Streimikiene

& Balezentis, 2013).

The European Union takes climate change seriously because global warming is a threat. This situation also poses a security threat to the European Union. The High Representative and the European Union Commission sent a report to the European Council in 2008 on the international security threats of climate change and what measures should be taken regarding climate change before these security threats emerge. The report also includes information on how security risks can be reduced (CFSP/ESDP Actions). Types of conflict that have been and may be seen due to climate change are also included in this report. According to the report, there are conflict risks due to many factors, such as the decrease or depletion of resources, the risk of destruction in coastal cities, migration due to global warming, border conflicts, and leadership conflicts. It was emphasized that immediate action should be taken to eliminate these threats arising from global warming (The High Representative and the European Commission, 2008).

At the meeting held between the European Community, African States, and ACP Group in May 2009, all parties decided to cooperate on climate change and published a declaration on this issue. “The Cariforum-EU Declaration on Climate Change and Energy” is a declaration that envisages international negotiations in the field of climate change. They also underlined the need for stronger action on climate change and the need for political support. The importance of establishing a team for ACP Group countries to make more efforts on clean development mechanisms was stated, and it was indicated that greater steps are anticipated from ACP countries on climate change (Council of the European Union, 2009).

In 2010, within the scope of the 3021st Environment Council Meeting, a decision was taken to organize the Green Paper. This decision, taken to help update the White Paper covering the protection and information of forests, is important for the European Union to follow forestry strategies and increase information about the protection of forests. They emphasized that forestation should be carried out in a healthy and strong way. At the same time, it has been pointed out that forests are of great importance in reducing the effects of emissions and fossil fuels, and it has been said that biodiversity in forests has an important place in global warming. Apart from these topics, water scarcity and drought were also

discussed during the meeting. It was emphasized that action should be taken to prevent larger-scale water shortages that have occurred or may occur in Europe. By drawing attention to issues such as the quality of water resources and their importance for human health, it was pointed out that this problem may grow in the future, especially in southern Europe. In this context, the "Water Framework Directive" report was presented at the meeting, and the necessity of taking more precautions in addition to the measures taken was expressed. Other discussed issues are that the risk of water scarcity will not only be within the scope of the EU and that international action is required, the necessity of cross-border cooperation, and the re-use of wasted water. The significance of risk planning and education has been re-emphasized in this area if a drought is inevitable. (Voulvoulis & Giakoumis, 2017).

In 2011, the European Council wrote a roadmap stating its goals until 2050. According to the targets, it is important to start a competitive low-carbon economy, develop sustainable technologies, and increase energy cost efficiency between these years. In addition, bringing the European economy into a more competitive structure is one of the issues included in the 2050 Roadmap (Council of the European Union, 2011).

Within the scope of the Conference of the Parties (COP 17) held in 2011, the European Union Council reminded the recommendations of the meetings and conferences held in 2010 and 2011 and the necessary steps to be taken. This attitude contains strong messages about the necessity of legal binding and taking concrete steps on this issue. The importance of international security was also emphasized in the given message. They claimed that they could offer help to developing countries. They emphasized that they could provide this assistance equally according to the capacity of each country. In this case, the rate of reducing global emissions is expected to increase by 30% (Rayner & Jordan, 2016).

In 2014, European Union leaders set the goal of reducing the greenhouse gas reduction level by 40% compared to 1990. The 2030 goals also include ensuring that the European Union economy has a more competitive structure. The target for renewable energy is set as 27%. The rates of these targets are determined according to the 2050 targets.



## **EU Policy Instruments for Addressing Climate Change**

In the early periods, environmental policies made by Europe to reduce environmental problems were generally produced by economists. However, in the following years, policymakers also became involved in this process, and more effective policies began to be produced. The element that makes policies more effective is the combination of both theoretical and practical solutions (Pearce & Barbier, 2000). Staying away from discussions on European Union environmental policies, it is the aim of this chapter to describe each of the basic modes of environmental regulation. The ones that appear as policy instruments and will be examined are command-and-control regulation (legislation), environmental taxes and charges, tradeable permits, and voluntary agreements. Each regulation has its weaknesses and strengths (Helm, 1998).

Most European governments have determined the basic point of environmental policy as legislation. The main points that make up this legislation are command-and-control emissions standards, licenses, prohibitions, or requirements to employ particular technologies (Hahn, 1993; Borkey & Leveque, 2000). The areas where legislation is most useful are in creating environmental responsibilities in order to prevent environmental damage and limit it where it cannot be prevented. They are also safe because they offer ultimate certainty (Segerson, 1996). However, the effectiveness of the legislation depends on institutions' compliance with and protection of these regulations. Legislation becomes a coercive force when environmental legislation comes into play on issues that governments want to regulate in the field of industry. In this case, the rate of compliance with environmental legislation will increase. The mere existence of environmental legislation, without the need for change or regulations, appears to be a binding force on institutions. It also serves as a guide for institutions when they need to change their behavior. When institutions do not comply with the legislation, they face penalties, and this creates an obligation for institutions to be environmentally sensitive.

On the other hand, there is also the opinion that the legislation is not sufficiently integrated against long-standing environmental problems, especially in economics and planning issues (Ekins, 1999). During the Fifth EAP, the Commission clearly stated the inadequacy of the legislation on some issues. He explained that the source of this situation is the

inability of institutions and individuals to adopt adequate legislation and the costs (CEC, 1992). There are also many discussions and criticisms about the standards of the legislation. These criticisms appear, especially in the economic field. The costs of penalties imposed for activities and institutions that pollute the environment are thought to be unnecessarily expensive. The most valid criticism in this field is that governments apply uniform penalties without following market standards and remain insensitive to individual, institutional, or sectoral needs (Baumol & Oates, 1988). Another instrument is environmental taxes and fees. The reason for such an instrument is that the side effects of markets and production processes are not taken into account and appear in ways that can harm the environment. Financial instruments are used especially to control environmental externalities (Pearce and others, 1989). This situation arises especially when companies and institutions ignore different types of environmental pollution by considering the specific use values of environmental resources. The aim of this is to expect profit from those who pollute the environment, but the whole society pays the price of environmental pollution. The main purpose is to ensure that institutions or companies that create negative externalities through taxes or fees use resources more carefully and create less pollution. Therefore, this creates a financial incentive to reduce pollution by introducing the polluter pays principle (PPP) or its advanced version, the user pays principle (UPP) (Fenton & Hanley, 1995). Another instrument, cost-covering charges, is a type of fee collected from the polluting institution to cover the costs necessary to provide environmental services, such as recycling waste or the administrative cost of recycling. Alternatively, this fee may be allocated or mortgaged for relevant environmental expenses that are not classified as a specific service to the taxpayer. The amount of the fee is calculated in direct proportion to the amount of the service. This is implemented to stop institutions or companies from polluting (Ekins, 1999).

Another instrument is incentive taxes. This type of tax may increase the extent of polluting behaviour or change such harmful behaviours. The calculation of this type of tax is determined by calculating the marginal cost and the marginal economic value obtained from the loss. The aim here is to eliminate the institution or company's ability to make profits by increasing harmful activities (Ekins, 1999).

Revenue-raising taxes may arise in different situations. First of all, this type of tax can be seen as an incentive tax. The second situation comes into play when it is not possible to accurately calculate the fees that cover the cost. The income obtained from this can be spent on environmental services or the development of services. The main purpose of this tax is to develop a profile for social, economic, or environmental sustainability. Similar taxes can be levied on production inputs such as energy. Thus, sustainability can be promoted in multiple areas through a single policy instrument. Classifying taxes in this way makes it easier for them to serve their purposes better (Ekins, 1999). Most economists agree that environmental taxes should complement rather than replace legislation. However, the legislation is inadequate in terms of environmental integration. Economic instruments such as taxes put pressure on improving environmental pollution by converting it into money (Pearce & Barbier, 2000). At the same time, since taxes are less prescriptive than legislation on how companies and institutions organize and manage environmental issues, it is easier for them to adapt to different sectors in different ways, and this increases their adoption rates and adaptation processes.

Economic instruments have both positive and negative features. While legislation forces institutions and companies to comply with environmental standards, incentives only encourage institutions and companies. Institutions and companies may choose to pay fees without controlling pollution. Some critics have also mentioned the risk that taxes could become a license for companies to pollute. They claim that polluters can resolve this problem by asserting that they have repaid society for their debts. (Beder, 1996). Likewise, if the tax to be paid is not a large cost for that institution or company, it has the risk of encouraging the company not to make more costly pollution reduction investments (Jones, 1999). In both cases, tax rate changes can be made to achieve the desired pollution reduction rate. Tradable pollution or emission permits have their origins in the United States Clean Air Act and the USA (Pearce & Barbier, 2000). The basis for this is the reduction in an institution or company's emissions or other polluting activities by an equivalent rate predicted elsewhere (Barde, 1997). Policies based on barter procedures like this are found to be efficient because they are more flexible. This is because companies or institutions with lower abatement costs have a financial incentive to reduce pollution because they can generate additional income.

As with economic instruments, tradeable permits have their drawbacks. The most fundamental problem is the possibility of regional concentration of trade, which can lead to trade disruption. This situation arises from the fact that factors such as optimum exchanges, price, and pollution are not distributed fairly (Balde, 2009). For this reason, it is possible for regulators to create or limit tradable permit regions, known as "bubbles", to prevent regional pollution caused by tradable permits (Cummings & Others, 2001). This principle coincides with the Kyoto Protocol. This situation has increased the European Union's interest in these programmes.

As the command-and-control limitations of environmental regulations become more accepted, many governments have indicated the need for increased collaboration to implement environmental policy. This situation is not only limited to command-and-control regulations but has also led to an increase in the number of voluntary agreements. These voluntary agreements have been implemented in areas such as emissions caused by motor vehicles and industrial greenhouse gas emissions (Keay-Bright, 2000). Voluntary agreements can be examined in three main categories. These are unilateral commitments, public voluntary programmes, and negotiated agreements.

Unilateral commitments are rules of conduct and guidelines generally developed by industries of their own volition (Bérkey & Lévêque, 2000). Institutions such as ISO14000 or the European Eco-Management and Audit Scheme (EMAS) are responsible for monitoring them. Since these rules and guidelines are a unilateral commitment and they develop their own environmental policies, there is no obligation to share this information with the public.

Public voluntary programmes are companies accepting and adopting non-legal performance, technology, and management standards developed by public institutions. Unlike unilateral commitments, the public agency defines the programme and monitoring arrangements to be implemented as a precondition. For companies, participation is entirely voluntary. EMAS and ISO14000 are examples of this programme. Companies participating in this programme can register for EMAS or ISO14000 accreditation. Having these standards provides a standard that can financially benefit them internationally. After the registration process, independent auditors periodically visit the

company for review (Bérkey & Lévêque, 2000).

Negotiated agreements are the most common form of voluntary agreement in European Union member states. These documents are formal agreements and cover a specific aspect of environmental management. Whether the contract will be constitutionally binding on the parties depends on the content of the contract. Regarding European Union member states, agreements are generally not binding, except for the Netherlands. Within the scope of the Dutch National Environmental Policy Plan, it was preferred that the contracts be binding (Hansen, 2005). If one or more parties who accept the agreement fail, they are subject to penalties. The reasons why voluntary agreements are popular in the European Union are the reduction in administrative costs, flexibility in achieving goals, increased innovation, and the ability to eliminate the need for contracts without any problems. However, there are some prerequisites for voluntary agreements to benefit from environmental goals. The most important of these prerequisites is creating an environmental standard. If these preconditions are not met, the negotiated agreement may cause a deterioration in environmental quality (Segerson & Micelli, 1998).

The number of parties participating in a voluntary agreement also has an impact on whether negotiations are successful (Bizer & Julich, 1999). If the demands of the parties are different or if companies from different branches of industry engage in the same negotiation, the likelihood of the parties being satisfied decreases, and the possibility of reaching an agreement decreases. The fact that the Netherlands imposes individual responsibilities on the parties in this procedure has helped reduce this problem (Borkey & Lévêque, 2000).

### **EU Policy Responses to Climate-induced Security Challenges**

It would be healthy to start first by addressing the European Union's climate security commitments. In the last decade, the European Union climate security policy has had a structure that focuses on the process rather than the output (Youngs, 2014). They have identified a school that focuses on multiple defence approaches, especially focused on protecting their geopolitical interests. Especially when implementing these approaches, the European Union's climate policy is more focused on foreign policy. At the same time, the European Union's climate policies have been relatively narrow when considered in

general terms (Zwolski & Kaunert, 2011). The reason for this is that instead of considering or producing new security systems against ecological disruptions, existing strategies have been included in climate issues.

The European Commission was one of the institutions that first expressed global warming as a security problem on an international scale. The most important step he took in this field was the article published in 2008 in which he stated that climate change should be at the centre of the European Union's security policy (European Commission & the High Representative, 2008). The most important result of this article is that it encouraged many subsequent studies and the development of new climate policies (Youngs, 2014). In the 2010s, many European Union member countries implemented their own climate strategies.

The European Council pledged to increase its efforts on climate security in 2018. It has been promised to expand strategies on conflict prevention, development, and disaster risk to address the relationship between climate change and security (Council of the European Union, 2018). The European Green Deal, published in 2019, transformed many different extensions of foreign policy into a more harmonious strategy. It aims to work more harmoniously on the international platform, especially with the proposed "Green Deal Diplomacy" and "Green Alliances" (European Commission, 2019). Following this goal, in 2020, the Climate Change and Defence Roadmap promised to include climate factors in the Common Security and Defence Policy framework (EEAS, 2020).

Despite these, the limitations of the European Union's policy stem from the union's narrow conceptualization of climate security (Lazard & Youngs, 2021). Although the European Union has mostly based its starting point on climate insecurity when creating its climate policies, it has created its policies by focusing on the symptoms of this insecurity rather than its causes.

One of the conditions for these policies to be more effective is that the European Union should prioritize the concept of ecological integrity. For example, solutions such as increasing forests to support the revitalization of ecosystems or arid regions and to provide healthy food, water, and air should be supported. Another example could be fighting against famine. Fighting famine threatens not only stability and human life

around the world but also peace between countries and within society. Since the mentioned policies aimed at revitalizing ecosystems also include informing people as a priority, they also support people's individual contributions by increasing awareness of this issue.

In recent years, the European Union has been talking about climate change as an existential threat (Borell & Hoyer, 2021). Such a tone demonstrates the aim and need for rapid decarbonization. This area is fully included in the areas of decarbonization and energy footprint reduction, which are the European Union's fields of work. While adopting this field of study, the European Union thought that this choice would be in the interest of peace and public interest. However, in this context, the steps taken by the European Union carry the risk of harming global security internationally and causing further acceleration of climate change due to the nature of decarbonization.

Climate change is affected by ecological crises as well as the release of more carbon dioxide into the atmosphere than normal. This influence leads to different crises, and this creates a cycle and mutual interaction. Due to this cycle, the health and order of systems such as water, soil, and biodiversity also decrease. Although the effects seem to be more local, there are more global effects. At the same time, these systems are closely interrelated and affect each other; even one of them harms the others. For example, while the impact on the soil creates the problem of famine, biodiversity is also greatly affected by famine. If a problem in the soil affects biodiversity, people will be affected by both of these situations. This situation shows that societies and individuals suffer greater harm from these situations. This is a necessary step to cope with larger-scale ecological problems to redefine security and imagine future scenarios. Some of the climate policies developed by the European Union have the potential to trigger different ecological crises.

On climate security, the United Nations Security Council discusses policies and research implemented and planned since 2007. The most important of these discussions is the addition of the climate element to approaches to fragility and conflicts (Lazard & Youngs, 2021).

Some of the examples discussed in this area address specific conflict regions, such as Iraq and Somalia, and how global warming will affect conflicts in those regions. While

examining such examples is beneficial, it also prevents discussions from deepening. Focusing on specific areas causes the discussed issue and the risks to be predicted to remain in a narrow perspective and within a narrow scope. When considered on a larger scale, discussing these problems within a geographically narrow area leads to discussions only on a geographical basis, moving away from discussing the climate security system. It also implies that such conflicts will occur outside of developed countries. However, these situations and conflicts are actually part of the economic system and produce results on a global scale. Another important situation is that while the focus is on conflict and violence, it is not actually focused on how this conflict and violence will increase climate deterioration. Another important situation is that there is no focus on any other factors other than carbon emissions, which have been talked about and focused on. For example, situations such as hydrological cycles or decreases in soil fertility have been ignored. The conclusion that can be drawn here is that climate security policies do not have a deep analysis feature. Ecological fragmentation is just one area, and there are many more issues to focus on.

Climate change is a process that involves long-term ecological change. In this process, there are systematic attacks on marine and terrestrial ecosystems (Fetzek & van Schaik, 2018). It is not possible to stop this situation only by stopping the use of fossil fuels. At the same time, the healthy functions of the planet depend on the health of each interconnected ecosystem. This ensures that ecological security takes precedence over other types of security. For example, it is impossible to ensure economic or political security without ensuring ecological security. Failure to ensure security also leads to conflict and violence. Therefore, ensuring the healthy functioning of ecosystems that operate interdependently should be a priority. The European Union does not have sufficient institutional equipment to address the broad parameters of ecological balance. At the same time, it does not have only this equipment but also the institutional processes that will produce a strategic approach to the challenges of decarbonization by redesigning economic models.

Reconceptualizing security within the framework of global warming requires the European Union to move away from the above-mentioned approaches and adopt an ecosystem-based approach. The current climate security policy is failing to protect the



resilience of ecosystems. The decline in natural resources leads to increased insecurity, conflict, and poverty. However, the European Union continues to focus on the end effects of ecological degradation instead of adopting an approach that addresses the main drivers of ecological degradation, which re-regulates areas such as development, trade, and foreign policy.

Ecological trends have been at alarming rates for a long time. At the same time, the rarer a depleting resource is, the more profitable it will become. To explain this with an example, the example of the wild animal trade would be appropriate. Wild animal biodiversity is decreasing day by day. For this reason, Latin American, Asian, and African criminal organizations have focused on wild animal smuggling. It is estimated that they earn between 7 and 23 million dollars a year (Ondoua & Others, 2017). Although such situations seem to be regional, they put the entire food chain at risk. This situation may lead not only to the disruption of the food chain but also to environmental degradation, and in the long term, it may cause consequences such as collapsing and reduced soil fertility (Estes & Others, 2011). In fact, a massification process has begun here. In this case, it can be said that the results of human activities do not only increase the emission of some harmful gases.

Another concern is that the water cycle is affected by the climate change process. Therefore, it can be said that policies and interventions should be concentrated in this area. There are many factors that have impacts on the water cycle. Many areas, such as forests, wetlands, and desert areas, can be included in this group. With the serious destruction of ecosystems, the hydrological cycle is disrupted. This situation disrupts the water distribution rates in ecosystems. Disrupted distribution causes not only regional effects but also global disruptions. This situation strongly increases the potential for conflict between countries whose coasts are close to each other. Apart from this, it is likely to cause major problems such as food shortages and water insecurity. With such effects, it would be more accurate to talk about long-term results. For this reason, making agreements that will facilitate joint work between countries that may be affected by this issue together can be recommended as an effective solution.

Adhering to current development practices and economic and political policies has the

potential to harm security in all areas. New policies and achievements are needed to strengthen the fight against situations such as climate change and water scarcity.

When reorganizing the foreign policy of the European Union, it should be regulated more carefully, especially in areas affected by conflicts or more susceptible to being affected. Another area that needs attention is development programs and the economic field. Developing and expanding these areas may be more beneficial. While carrying out these arrangements, using an ecosystem-based mapping system, receiving support from hydrologists as well as researchers and officials competent in the ecological field, and conducting a study in collaboration will provide great integration and benefit. Moreover, the European Union faces the challenge of preventing risks related to the Green Deal and its transit routes. The European Green Deal is a consensus-based on decarbonizing and digitalizing society and the economy. The aim of the European Union is to continue to develop economies in the fields of technology and energy by ensuring digitalization in the economic field while respecting the environment and ensuring progress without pausing economic and socioeconomic growth while protecting the environment. In this scenario, the European Union may move away from fossil fuels, albeit with difficulty. However, this would require removing large amounts of material from the earth. In this case, the European Union's future will depend on renewable resources such as solar, wind, or lithium-ion batteries, robotics and digital technologies, and military equipment such as drones. The European Union sees guaranteeing the materials of these substances or technologies as a way of security.

The idea of stopping climate change requires decarbonization. However, the most important factors necessary for this situation to change are to move away from being based on consumption and to end exploitation. Without these changes, it becomes impossible to achieve the mentioned goal (NYDF, 2020). Moving away from situations such as raw material extraction activities, where environmental pressures do not decrease and human rights violations continue or even increase, are necessary moves for change.

The World Bank conducted a study in this field in 2017. In this study, the effects of mining on low-carbon transitions were examined. According to research, the minerals required for the future of renewable energy will have a higher material density than fossil

fuels (Lazard & Youngs, 2021). The extraction and processing of these minerals require intense effort and also increase environmental pollution. Serious water pollution is inevitable, especially in the region where mines are mined. It has also been stated by engineers that water pollution will also cause food pollution and that there may not be enough water to process the mined minerals (Katwala, 2018). Not only the World Bank but also the European Environment Agency have expressed their concerns on this issue (Ambrose, 2021). They stated that separating the targeted growth from carbon emissions may only be possible for a while, and it has been stated that the situations that will occur in the following periods will increase ecological destruction and fragmentation (Vaden & Others, 2020).

Failure to establish the link between decarbonization and ecological destruction has the possibility of leaving the European Union vulnerable to increasing risks and migration. It may compete for scarce natural resources in the European Union. This situation may lead to impotence and distrust within the European Union. In order to develop a more comprehensive idea of ecological security within the scope of the European Union, it is essential to understand the connection between geopolitical competition and climate-related risks. In addition, the effects of current economic policies on ecology and security should be well identified and plans and programs should be created accordingly. The areas where the European Union should be open to change in order to ensure factors such as reducing consumption are political and economic areas. It is certain that the changes to be made in these areas will also affect other areas, and in this context, there will be points that need to be updated in the areas of geopolitics and regional and national security. While these areas are reorganized on national and international platforms, they should be addressed from an eco-social perspective.

## **CASE STUDIES**

In this section, two case studies will be examined. The cases to be examined are specifically selected cases, and they both put forward arguments that the risks caused by climate change affect human rights. In this context, for both examples, information will first be given about the course of the cases and their analyses will be carried out.

### **Urgenda Foundation v. State of the Netherlands Case Study and Discussion**

*Urgenda Foundation v. The State of the Netherlands* case is an extraordinary case in that it manages to overcome many of the difficulties associated with human rights-based claims in climate cases. It stands out as an important example of other files making similar demands. It was often used as an example in the cases that arose in the following years or inspired the opening of the files. One of the most important points of this case is that it showed that legal developments have the possibility of influencing legal norms, rules, and models in other jurisdictions, and may have a place in international law. It has become a transnational example, especially in the field of climate law (Saiger, 2020). Judges from different countries can cross-reference each other's decisions, and this requires local lawyers to have more knowledge about the international legal system (Wegener, 2020).

*Urgenda v. The State of the Netherlands* legal file is a case that has attracted great attention since the first decision was made by the Hague District Court in 2015. Although some researchers argue that the importance attached to this case has been overestimated, it is impossible to underestimate its significant impact on climate litigation, especially within the European Union. The “Urgenda effect” is seen in later examples of climate-related litigation (Van Zeben, 2015).

In 2015, the Dutch environmental organization Urgenda Foundation, together with 886 Dutch citizens, initiated legal action through the Hague District Court. The people they represent include not only current and future generations of Dutch citizens but also individuals from other countries (Bouwer, 2020). The main purpose of the case was to challenge the newly elected Dutch government's decision not to adhere to the previous administration's climate change prevention policies, which they perceived as inadequate

(Paiement, 2021). Urgenda Foundation argued that the state had failed to fulfill its duty of care and acted unlawfully (Hague District Court, para. 4.1.). They also claimed that the government's climate policies violated the rights under Article 2 of the European Convention on Human Rights (ECHR), the right to life, as well as Article 8, the right to respect for private and family life (Hague District Court, para. 3.2.).

The case is a strategically important case. It emerged as a result of a meticulously planned and carefully executed process (Bouwer, 2020:24). Although Urgenda Foundation CEO Marjan Minnesma emphasized that they would not follow this case ten years ago, she announced that they will follow it more closely now that a wider group is aware of the impending disaster (Bouwer, 2020). The case was first heard by the Hague District Court and the decision in favor of the applicants attracted great attention. This decision was later upheld by the Hague Court of Appeal and the Supreme Court of the Netherlands.

Throughout the legal process, the courts relied on a comprehensive framework that made use of European Union law, international law, Dutch law, as well as climate science, and articles of the European Convention of Human Rights (Fisher & Others, 2017). This approach is supported by *Urgenda Foundation v. It*. It led to a legal outcome that demonstrated the pioneering role of the State of the Netherlands in many respects. This case was the first important climate action case based on tort law and the first example to succeed (Bouwer, 2020). It also represents the first case in which a court has ordered a government to reduce greenhouse gas emissions for reasons other than a legal obligation (van Zeben, 2015). In particular, for the first time, a national court has used the principle of common but differentiated responsibilities as a complementary tool to define the scope of the state's climate obligations under domestic law (Bouwer, 2020).

The decision raised questions and criticisms regarding the role of local courts in ensuring compliance with the European Convention on Human Rights on general policy. With this case, the role of the Dutch local courts appears to have exceeded the freedom of action granted to them by constitutional law.

First, the Court of Appeal ruled that by 2020, the cumulative volume of greenhouse gas emissions of the Dutch government must decrease by at least 25% compared to 1990. These figures set a target of 49% by 2030 and 80% to 95% by 2050 (Hague District Court, Para. 46). The Court of Appeal found this rate set for 2020 to be insufficient to meet the 2030 target (Hague District Court, Para 47). According to the Court, rejection or failure

to increase this target constitutes a violation of Articles 2 and 8 of the European Convention on Human Rights (European Convention on Human Rights - ECHR Official Texts - ECHR - ECHR / CEDH, n.d.).

Article 2 of The European Convention on Human Rights is on people's right to life (European Convention on Human Rights - ECHR Official Texts - ECHR - ECHR / CEDH, n.d.). The right to live is the most fundamental human right, which in a sense is the source of other human rights. The basis of this right is to protect people against an unnatural form of death. This right began to be included in international law norms and at the same time protected, especially in response to widespread violations of the right to life during the Second World War. (Karan & Gemalmaz, 2012). On the other hand, Article 8 of the Convention includes the protection of private and family life (European Convention on Human Rights - ECHR Official Texts - ECHR - ECHR / CEDH, n.d.). Within the framework of this article, there are four fundamental rights protected under the heading of respect for private life, although their subheadings include more rights. These are the rights to private life, family life, housing, and communication. Respect for private life ensures that a person's dignity and personality in society can be lived freely (Birtane, 2021). In the decision given within the framework of the Urgenda case, it was stated that the state has a positive obligation to protect the lives of its citizens within its own borders, in accordance with Article 2. The court stated that the state faced a significant situation and risk such as the loss of life of its citizens or problems in their family lives due to the risky consequences of climate change. Regarding Article 8, the obligation to protect the right to home and private life is expressed (Hague District Court, Para 43).

The European Court of Human Rights has accepted that various articles of the Convention are related to environmental issues (Ozalp, 2013). However, in any case, it is an inference from a general comment that Articles 2 and 8 are closely related to the decision. With this feature, the Urgenda case appears as a case that has gone beyond the standards of the European Court of Human Rights.

In making its decision, The Appeal Court also raises further questions that question the role of the courts. Not only Articles 2 and 8 but also Article 94 of the Dutch Constitution are among the articles referenced in this case. This article is an article that also has a place in international law regarding the immunity of the individual. At the same time, this article

obliges the courts only to annul domestic legislation. It does not give authority to take measures to ensure compliance with international law within the scope of this article. Considered within the framework of the local court, the Dutch Supreme Court commented that various interests had to be balanced and that it was a political decision that a judge could not make (Bovend'Eert, 2022). This situation created discussions about the separation of powers for the Urgenda case. The district court and the court of appeal also acted within the framework of this justification. They stated that the emission reduction order did not necessarily require legislative action and emphasized that sufficient space was given to the courts to adapt to this situation (Hague District Court, Para 67). The important point here is that it can be said that the Hague courts have expanded their role of obliging the government, redefining the separation of powers established by the Dutch Constitution, and providing a guarantee that can be compatible with the European Convention on Human Rights.

In this case, although Urgenda Foundation actually wishes to represent future generations, the Court is of the opinion that this is not legally acceptable and can only represent existing people. The thoughts of Urgenda Foundation members are understandable here. The main idea here is to leave a cleaner, livable, and safer world to future generations. This situation is actually closely related to security theories. In particular, the effects of climate change currently threaten environmental security and raise concerns about human security. In this regard, it is important that the Court recognizes that the young population living today has to struggle with the negative effects of climate change throughout their lives, which forms the basis of this case. In addition, the foundations of some ongoing cases also highlight the rights of young individuals (Voigt, 2021). What needs to be taken into consideration in this regard is not that age groups are affected by the consequences of climate change, but rather that the impact on generations is discussed. It is important to distinguish this because it has been observed that the age factor is highlighted in some sample cases (Bahr & Others, 2018).

The Dutch government has certain obligations towards its citizens within the scope of environmental and human security. Although the Constitution accepts the obligation of the state regarding this issue, it does not provide a specific path on how to fulfill this obligation and leaves room for the government. The government's freedom in this area is not limited and a certain standard must be met. The court also stated that while the state

takes the necessary precautions regarding climate change, which poses serious risks for people and the environment, the issue of climate change should also be emphasized. He also underlined that it is essential to take mitigating measures to prevent climate change and that adaptation-oriented measures can only protect individuals to a limited extent. At the same time, this process is not a process where change can be achieved through the efforts of one country. There is a need for this study to be conducted worldwide. When considered specifically in the Netherlands, the climate policies adopted are mostly based on the regulations developed within the framework of the European Union and the United Nations. In fact, although this situation brought some obligations to the Netherlands, it was also seen that the obligations were fulfilled, and the policies implemented in this case were not sufficient.

In this regard, the Court also accepted that the Netherlands had obligations in the mentioned matters. However, the repeated situation is actually left to the initiative of the Dutch government as to how to fulfill these obligations. For this reason, it has been said that the Urgenda case cannot be directly based on international regulations (Leijten, 2019). The only binding rule here is that a state must fulfill its international obligations while implementing its own national law. This situation was taken into consideration throughout the trial. Thus, the Court reiterated that the Netherlands must act in accordance with the obligations arising from its connection with international law while exercising its authority within the framework of national law.

The Netherlands has binding internationally accepted obligations not only on climate change but also on human rights. As stated above, in this case, there is a violation of Articles 2 and 8 of the European Convention of Human Rights and the right to life and the right to respect for private life. The Court accepted that these articles were not completely independent of the case. At the same time, he reminded us that it is mandatory for the Dutch state to respect these rights. Even though the European Convention on Human Rights does not specifically mention the right to a clean environment, the European Court of Human Rights considers the connection between people's rights and the environment in its decisions. In this context, another obligation of the state is to ensure that human life is not threatened by environmental factors. The state may also have responsibilities in cases where private and family life is affected (Van Zeben, 2015).



Another area that the court addresses is whether there is tort liability arising from violations within the framework of the Dutch Civil Code. The court requested that some issues be reviewed by adapting them to climate change. These factors encompass the type and extent of damage resulting from climate change, the predictability and awareness of such damage, the potential for climate change to reach more perilous levels, the government's stance regarding this situation, and its capacity to implement preventive measures. (Van Zeben, 2015). While reviewing these issues, the Court examined the documents of international institutions such as the IPCC and the United Nations, which have conducted international studies on climate change issues, and presented reports and research. European Union reports were also used. On this issue, the Court unquestionably accepted the potential for climate change to reach dangerous levels and stated that serious environmental problems would occur in all countries, including the Netherlands. At the same time, with this research conducted, the court confirmed that the Netherlands had information about the risks that may arise from global warming since 1992 and precisely from 2007. It has been confirmed that the Netherlands has the power to control greenhouse gas emissions and can take measures in this regard.

While the Dutch state's defense argued that emissions reductions limited to the Netherlands would not have a global impact, a higher national target than the current one would not significantly contribute to the global goal of limiting temperature rise to 2 degrees Celsius and that achieving this global target necessitates collective global efforts, the court disagreed. It asserted that, as climate change is a global issue demanding global solutions, the Netherlands cannot exempt itself from its duty to undertake preventative measures. As a result of the legal analyses explained and interpreted above, the court emphasized that a legal basis other than legal obligations should be taken as the basis for the necessity of the Dutch state to address the issue of its obligation to reduce greenhouse gas emissions. In this respect, the Urgenda case decision is a first. At the same time, it was decided that if environmental damages were caused by the behavior and negligence of different states, each state would be held responsible for its own production and the damage it caused.

### **Agostinho and Others v Portugal and 32 Other States Case Study and Discussion**

Duarte Agostinho and Others v. Portugal and 32 Other States is the case submitted to the European Court of Human Rights by six Portuguese young people in September 2020. This case was filed because the defendant states contributed to climate change and violated human rights (Duarte Agostinho and Others V. Portugal and 32 Other States - Climate Change Litigation, 2022). The defendant countries are Turkey, Norway, Ukraine, the United Kingdom, Switzerland, and Russia, in addition to all European Union countries. One of the highlights of this case is that it is the first climate change case heard before the ECtHR (Duarte Agostinho: Complaint). Duarte Agostinho and Others stated that the defendant states did not take sufficient measures to limit global warming targeted by the Paris Agreements to 1.5 degrees Celcius and that they continued and will continue to emit greenhouse gases (Duarte Agostinho and Others V. Portugal and 32 Other States - Climate Change Litigation, 2022). ECtHR took action quickly and notified the defendant countries in November 2020 that they had to respond by February 2021 (Duarte Agostinho and Others V. Portugal and 32 Other States - Climate Change Litigation, 2022). Despite all the objections of the defendant countries, the Court did not give up on this decision and only gave the defendants until May 2021 to complete their defense (Duarte Agostinho and Others v. Portugal and 32 Other States, 2020). The plaintiffs received the defendants' defense in August 2021, and the plaintiff filed his response in January 2022. In June 2022, the Chamber of the European Court of Human Rights waived its jurisdiction in favor of the Grand Chamber. According to the last statement made in April 2023, the date of the case was determined as 27 September 2023.

This case is an important case in many areas. Especially after the Urgenda case, even though both cases are in the same field, this ongoing case filed by Duarte Agostinho and Other is followed with enthusiasm by a larger audience with the additional powers of an international court. It is clear that the results of the case, which will take place in September 2023, will be important and will affect rights-based climate cases.

The case of Duarte Agostinho v Portugal is the first application asking the Court to make a decision on the climate crisis (Duarte Agostinho and Others V. Portugal and 32 Other States - Climate Change Litigation, 2022). The starting point is that the United Nations Framework Convention on Climate Change document cannot offer an effective solution (Rodriguez-Garavito, 2021). It is to become a new focus of attention by both facilitating government actions and applying legal means within the scope of local regulations and

international documents (Egea, 2021). The defendants are responsible for the violation of the European Convention of Human Rights by holding them responsible for the damage and risky situations caused by climate change, as each of them contributes to the emissions that cause global warming. Although they argued that they violated Articles 2, 8, and 14 within the scope of the European Convention of Human Rights, upon the Court's own initiative, Article 3 within the scope of the European Convention of Human Rights was also included in the case as a possible violation. While presenting their legal claims, Duarte Agostinho v. others followed an application process based on the "Guiding Principles on Shared Responsibility in International Law" document. According to this document, states adopting separate policies and taking different actions argue that they share responsibility for more than one international tort (Noonan, 2022). This responsibility can be attributed to each state separately. There are points where this view makes sense. For example, if an action that caused harm was carried out by an unspecified subject and there is more than one individual, institution, or state policy that can be held responsible for this action, this responsibility can be divided among all potential states that could or have already carried out the action.

With this example, the starting point of the application is that the plaintiff, Duarte Agostinho, and others, sued the defendant, Portugal, and 32 other states, for the damage caused to the environment and within the scope of the ECHR, and demanded that the defendants fulfill their obligation to save those affected by this damage. At the same time, the failure of the state, which is the institution that should protect individuals from the effects of climate change, to fulfill its obligations is the starting point of this case. The failure of states to assume responsibility for the effects of climate change or their desire to assign it to other states and institutions can also be considered an important reason for filing this lawsuit.

Although The European Convention on Human Rights is an agreement that does not directly deal with the issue of climate change, it is known to be especially valid for risks arising from natural disasters (Keller & Heri, 2022). Considered from the perspective of the plaintiffs living in Portugal and taking into account the increase in heat waves in this region, the claim that the risks posed by global warming exceed the minimum level of severity required by the Court's jurisprudence is provable and is a seriously strong

argument on behalf of this case. However, this does not mean that the situation will become easier for the plaintiffs.

First, examining articles 2, 3, and 8 within the scope of the European Convention on Human Rights will enable the issue to be addressed in a more consistent manner. As mentioned in the Urgenda case, Article 2 of the Convention deals with the right to life. This article emphasizes that a person cannot be deliberately deprived of his life outside of a court order (European Convention on Human Rights - ECHR Official Texts - ECHR - ECHR / CEDH, n.d.-b). Article 3 of the Agreement states that no one shall be subjected to torture or degrading treatment or punishment (European Convention on Human Rights - ECHR Official Texts - ECHR - ECHR / CEDH, n.d.-b). Article 8 mentions respect for private and family life. According to this article, everyone has the right to demand respect for their private and family life, and there can be no intervention by a public authority in the exercise of this right, except in special cases (European Convention on Human Rights - ECHR Official Texts - ECHR - ECHR / CEDH, n.d.-b). The obligations in the articles of the European Convention of Human Rights that need to be evaluated are documents that need to be interpreted together with other international documents. For example, international agreements or documents such as Article 2 of the Paris Agreement and the target of limiting the warming caused by global warming to 1.5 degrees Celcius, UNFCCC targets, or the United Nations Convention on Rights of the Child (Convention on the Rights of the Child, n.d.) are also documents that can be beneficial for this cause. The use of international law as an interpretive background for the evaluation of cases is a well-established practice for many courts (Galka, 2022).

On the other hand, the arguments put forward in this case have their limitations. This is because none of the 33 defendant states has put in place a legal regime that assesses emissions that occur outside the territory of those states. This situation creates a big problem, especially in associating emissions caused by carbon imports with countries. At the same time, if we consider the scope of the international documents mentioned above, especially the UNFCCC and the Paris Agreement, although they mention emissions produced on the country's territory, they do not contain an article about emissions resulting from imports. The main request of the plaintiffs here is for the relevant provisions of the UNFCCC and the Paris Agreement to be developed by the European Court of Human Rights. Although this situation does not seem very possible, so far, the

Court has used international documents and European Union environmental law to fill the gaps in the European Convention on Human Rights. Moreover, the first action of the Court is inspection. At this point, it is thought that cases related to global warming and human rights can be better evaluated by local courts. In the Urgenda Foundation case, which is considered an example of this situation, the Dutch Supreme Court made determinations regarding the relevance of the precautionary principle to the European Convention of Human Rights, which are not supported by the European Court of Human Rights' own jurisprudence (Keturakiene & Murauskas, 2023).

Another point is that it may cause problems if the plaintiffs went directly to the European Court of Human Rights without applying to the local court. Under normal circumstances, in order for a case to be referred to this court, they must first have exhausted all domestic law remedies by applying to local courts. The plaintiffs' explanation here is that they could not bring the claims against 33 countries to a national judicial authority. Because it is not possible for such a large-scale case to be followed by national courts. For this reason, they stated that the existing methods were not possible and applied directly to the European Court of Human Rights. This may lead to the trial being dismissed at an earlier stage before any proceedings are initiated (Mauri, 2022). It has a particularly important place, especially considering that many local courts in Europe handle this type of climate change cases. However, this can be resolved by inviting a local court to seek an advisory opinion from the European Court of Human Rights, in accordance with Protocol 16 of the European Convention of Human Rights. During the application, the plaintiffs stated that they hoped the Court would be a guide for the local judiciary. Since the trial is still ongoing, developments on this issue will be followed in the future.

It has been stated above that Articles 2 and 8 within the scope of The European Convention of Human Rights were chosen for this case. In addition, the Court's inclusion of Article 3 of the Convention creates different points of discussion in this case. Within the framework of Article 3, this situation is an issue open to discussion in terms of human security, environmental security, and law (Heri, 2020).

First, this article is not a frequently cited and used article in climate change cases. For example, it is not a valid article for the Urgenda Foundation case examined above. The first possibility that can be considered regarding the use of Article 3 within the scope of this case is that states cannot physically and mentally protect people within their

jurisdiction from the negative effects of climate change. Although this actually appears as a positive obligation, it is clear in the section where the security issue is discussed how it can cause problems and create a situation of insecurity that can be included in more than one security type. At the same time, meanings such as requiring states to take legal measures such as limiting carbon emissions can also be inferred from the inclusion of this article (Galka, 2022).

Under normal circumstances, one of the first thoughts that comes to mind in the context of Article 3 is the principle of deportation or refoulement. Especially when climate change is included in the subject, the term climate refugees can also be included in this subject. However, since this is not the case in this case, it is mentioned only because this situation may be the case in other cases (Heri, 2020).

Insecurity and vulnerability are important and should be taken into consideration in this field. In this case, the plaintiffs are in a vulnerable position as members of a certain group, and due to this situation, makes them more vulnerable, they have initiated this lawsuit process within the framework of distrust towards the defendant countries. At the same time, if this situation needs to be evaluated within the framework of Article 3, the ages of the plaintiffs must also be considered. Considering that the youngest of the plaintiffs is 11 years old and the oldest is 24 years old, article 3 may have been added by the Court considering that children are more vulnerable than adults and that a situation that would not affect adults could easily affect a minor child.

As a result, although this case has been handled as a priority, no conclusion has been reached yet. The next hearing of the case will be on September 27, 2023. For this reason, it is a case that will continue to be observed since there is no result yet. It is a noteworthy case, not only because of the subject of the case and the young age of the plaintiffs but also because there is a possibility of a decision on the Article 3 request included by the Court. The inclusion of this article, along with articles 2 and 8, which came to the agenda with the Urgenda case, has the potential to add new issues to future cases (Nollkaemper & Burgers, 2020).

## CONCLUSION

The effects of climate change, together with increasing air temperatures, carbon dioxide levels, and many other factors since the beginning of the Industrial Revolution, are making themselves felt and causing certain risks. These risks create insecurity both internationally and individually.

The concept of security, which changed and expanded, especially in the post-World War II period, began to focus on areas other than military security. At the beginning of the 20th century, emphasis began to be given to this area along with environmental problems, and the policies created with many regulations made at the international level began to reveal the relationship between environment and security. Natural disasters such as drought, flood, hurricane, and water shortage, which are considered within the scope of environmental security, are factors that create insecurity. In this context, certain policies and strategies are being developed in order to prevent or reduce insecurity.

These policies are often developed in accordance with international agreements and protocols. Environmental problems and policies developed in this field have a special place in European Union policies.

European Union countries, which aim to integrate economically, politically, and culturally, have developed many strategies in the field of climate change. Undoubtedly, although most of these strategies are economy-based, they have also created policies that include many initiatives to prevent the emission of greenhouse gases. The environmental factor has an important place in the process of creating common policies, having effects in many areas such as the protection of agricultural areas, economic developments, industry and energy sectors, or tourism. For this reason, it is indisputable that the European Union plays a major role in this issue both within itself and on the international platform.

This research covers the period from the date when climate change began to be expressed as a problem on the international platform. In this time period, the steps taken by the European Union regarding climate change are examined chronologically. The aim of the two examples chosen in this context is to concretize the analyzed facts and events and see how they are used on a certain level. In this context, these topics, which are evaluated in

three main sections, are concretized within the scope of two case studies discussed in the fourth section.

The first chapter focuses on climate change. The causes of climate change and global warming, both natural and caused by human activities, were analyzed and information was given about the situations that occurred or were expected to occur as a result. At the same time, agreements and protocols, as well as conferences and meetings drawing attention to climate change since the 1970s, were examined. The conclusion that can be drawn from this section is that although climate change is seen as an inevitable process, human activities must be evaluated and carried out within this framework in order to slow down this warming. It is of great importance to pay attention to factors such as usage patterns amounts of resources and greenhouse gas emissions. Meetings and conferences held on the international platform are trying to draw attention to this issue and have pointed out that steps need to be taken to raise awareness. Within the scope of the evaluated situation, the importance of combating global warming internationally was emphasized, and discussions took place about the need for not only countries but also individuals to be careful about this issue. Concrete steps were attempted to be taken with the agreements and protocols established in line with these conferences and meetings, and the importance of acting in harmony and fighting together on the international platform was emphasized.

In the second chapter, the concept of security is discussed. How the concept of security has evolved over time is explained, and its place in international relations theories and its connection with global warming are established. While examining which sub-branches of security affect the framework of climate change, the interconnections of the sub-branches of security with each other were emphasized. The security types emphasized within the scope of this research are environmental security and human security. This issue has specific importance within the context of climate change and global warming. First, the concept of security is a concept that arises from a real or perceived threat to individuals, groups, or states themselves. The importance of this concept goes back to basic human instincts. Although there are different types of security problems that affect states, groups and individuals separately, environmental security is of great importance in the present. The reason for this is that many risks may arise or may arise due to climate change and global warming. Climate change, which not only affects living spaces and



cities, also brings with it the problem of not meeting basic needs such as water and food shortages. At the same time, conflicts between countries may increase due to climate change, and this has the potential to affect military security.

In the third chapter, the policies of the European Union specifically on climate change are examined. In order to understand how these policies were established, the connection with the first two parts of the research was established. This connection helped to understand in a chronological manner how policies emerged and on what foundations they were based. While the research is carried out on the basis of national policies, European Union policies are particularly mentioned. In this inquiry, an analysis is undertaken regarding the role played by the European Union in global politics, specifically with regard to the decisions and measures taken in environmental policies, aiming to gain an understanding of the role played by adaptation strategies in addressing climate change-induced disasters. Within the scope of the literature review, it was understood that the European Union is making intense efforts on this issue. Although the strategies, programs, and policies developed in this context include environmental security, they are actually based on the economy. Although these strategies aim to mitigate the effects of climate change, they actually take steps to integrate economic systems into this area. It is undeniable that the European Union acts more sensitively and takes more action on this issue than many countries. However, there are big question marks about how sufficient the strategies created strategies are or will be. This is the main topic discussed in this chapter.

Finally, there are two case studies analyzed in the fourth chapter. In this context, *Urgenda Foundation v. The cases State of the Netherlands and Agostinho and Others v Portugal and 32 other States* were analyzed. While analyzing these cases, the issues mentioned above were also emphasized. The increase in environmentally based cases today actually shows that individuals' awareness and sensitivity levels in this field have increased. However, as mentioned above, the primary goal of most designed policies is not sufficient to protect the environment or change the course of climate change. This situation creates insecurity in individuals about their future. At the same time, considering the disasters that have occurred or have an increasing potential to occur, the increase in environmental cases seems normal. Access to clean water resources and food, especially the right to life, are human rights, and it is a conscious behavior for citizens to take action by resorting to legal means within the framework of the responsibility of states to protect their citizens.

In this context, the decisions made by the courts, taking into account human rights, especially in the cases analyzed, both increase the sense of security in individuals and impose obligations on states to take more concrete steps against the effects of climate change in the name of protecting their citizens. Therefore, these cases are important and need to be considered.

With the analyses and evaluations carried out in line with the purpose of this study, the importance and destructive potential of climate change are evaluated and the sufficient and inadequate points of the developed strategies are explained. There are still many steps to be taken and many issues to be discussed in this area. However, it is clear that we need to be more sensitive when discussing these issues, especially regarding human rights and security issues. The European Union still has ongoing studies on this issue, and the point that should be remembered within the scope of these studies is the necessity of taking steps on an international scale regarding climate change.

## BIBLIOGRAPHY

- Acıkmese, S. A. (2004). Uluslararası İlişkiler Teorileri Işığında Avrupa Butunleşmesi. *Uluslararası İlişkiler*, 1 (1), p.1-32.
- Adger, W. N. (1999). Social Vulnerability to Climate Change and Extremes in Coastal Vietnam. *World Development* 27(2).
- Adger, W. N., Barnett, J. & Ellemor, H. (2010). Unique and Valued Places at Risk. Pp. 131–8 in S. Schneider, A. Rosencranz, and M. Mastrandrea (eds.), *Climate Change Science and Policy*. Washington, DC: Island Press.
- Akalın, M. (2014). İklim Değişikliğinin Tarım Üzerinde Etkileri: Bu Etkileri Gidermeye Yönelik Uyum ve Azaltım Stratejileri. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 7(2), p.351-377.
- Akman Y. (1990). İklim ve Biyoiklim, Palme Yayın Dağıtım, Ankara, p.8.
- Ambrose, J. (2021). Green Economy Plans Fuel New Metals and Energy “Supercycle.”. *The Guardian*, p.10.
- Amicus Reaffirms States’ Human Rights Obligations to Adequately and. (n.d.). ESCR-Net. <https://www.escr-net.org/news/2021/amicus-reaffirms-states-human-rights-obligations-adequately-and-effectively-address#:~:text=to%20Strategic%20Litigation-,Amicus%20reaffirms%20States%27%20human%20rights%20obligations%20to%20adequately,effectively%20address%20the%20climate%20crisis&text=On%20May%206th%2C%20several,Duarte%20Agostinho%20and%20others%20v.> (Access date: 02.06.2023)
- Anderson, K. & Bows, A. (2008). Reframing the climate change challenge in light of post-2000 emission trends. *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* p.366.
- Angeleri, S., & Nivard, C. (2022). *The European Social Charter: A Commentary: Volume 1, Cross-cutting Themes (Vol. 1)*. Martinus Nijhoff Publishers.
- AR4 Climate Change 2007: Synthesis Report — IPCC. (n.d.). IPCC. <https://www.ipcc.ch/report/ar4/syr/> (Access date: 13.05.2023)
- AR5 Climate Change 2013: The Physical Science Basis — IPCC. (n.d.). IPCC. <https://www.ipcc.ch/report/ar5/wg1/> (Access date: 13.05.2023)
- Arıkan, Y. & Özsoy, G. (2008). A’dan Z’ye İklim Değişikliği. Ankara: Bolgesel Çevre Merkezi Yay. – REC Türkiye.
- Arslan, R. (2005). Avrupa Birliği ve Savunma Politikası: Dünya Sahnesine Geri Dönüş Mü?. *Gazi Üniversitesi İİBF Dergisi*, 7(1), p.229-248.

- Arslan, H. (2011). Bir Doğrudan Eylem Hareketi Olarak Greenpeace (Yeşil Barış). *SDÜ Fen Edebiyat Fakültesi Sosyal Bilimler Dergisi*, (23), p.247-258.
- Asci, F. K., & Öztürk, K. (2017). Avrupa Birliği'nin Normatif Gücü: Kavramsal Bir İnceleme. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (28), 359-370.
- Atik, H. (2017). *Küresel Isınma, İklim Değişikliği ve Sosyo-Ekonomik Etkileri*. Ankara: Nobel Akademik Yayıncılık.
- Aydogdu, G. (2020). İklim Değişikliği ve Tarımsal Uygulamalar Etkilesimi. *Ondokuz Mayıs Üniversitesi İnsan Bilimleri Dergisi*, 1(1).
- Baer, P. (2006). Adaptation: Who Pays Whom? Pp. 54-148 in N. Adger, J. Paavola, M. Mace, and S. Huq (eds.), *Fairness in Adaptation to Climate Change*. Cambridge, MA: MIT Press.
- Bähr, C. C., Brunner, U., Casper, K. & Lustig, S. H. (2018). KlimaSeniorinnen: Lessons From the Swiss Senior Women's Case for Future Climate Litigation. *Journal of Human Rights and the Environment*, 9(2), p.194-221.
- Baldé, Y. (2009). Migrants' remittances and economic growth in Sub-Saharan Africa. *World Development*, 33, 1-23.
- Barbour, E. C. (2010). *International Agreements on Climate Change: Selected Legal Questions*. Congressional Research Service, Library of Congress.
- Barde, J-P. (1997). 'Environmental Taxation: Experience in OECD Countries,' in T. O'Riordan (Ed.) *Ecotaxation*, London: Earthscan, p.223-45.
- Barnett, J. (2009). Human Rights and Vulnerability to Climate Change. p. 51-134 in S. Humphreys (ed.), *Human Rights and Climate Change*. Cambridge: Cambridge University Press.
- Batan, M. & Toprak, Z. F. (2020). İklim Değişikliğinde Etkenler ile Sonuçların Birbirini Tetiklemesi. *DUMF Muhendislik Dergisi*, 11(2), p.759-769.
- Bates, D.C. (2002). "Environmental Refugees? Classifying Human Migrations Caused by Environmental Change", in *Population and Environment* 23 (5) p.462– 476.
- Baumol, W.J. & Oates, W.E. (1988). *The Theory of Environmental Policy* (Second Edition), Cambridge: Cambridge University Press.
- Başçelik, B. E. (2003). Savaş & Ekoloji. *Başkent Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*. Savaş Özel Sayısı.
- Baskaya, F. (2020). *Gençlerle Bas Basa: İklim Krizi ve Ekolojik Yıkım*. İstanbul: Yordam Kitap.

BBC News Türkçe. (2011, April 28). ABD’de kasırgada can kaybı 240’a yükseldi. BBC News Türkçe. [https://www.bbc.com/turkce/haberler/2011/04/110428\\_storm](https://www.bbc.com/turkce/haberler/2011/04/110428_storm) (Access date: 09.06.2023).

Beder, S. (1996). “Charging the Earth: the Promotion of Price-based Measures for Pollution Control,” *Ecological Economics*, 16 (1), p.51-63.

Bell, D.R. (2004). “Environmental Refugees: What Rights? Which Duties?,” in *Res Publica*, 10(2) p.134–150.

Benson D. & Adelle C. (2013). “EU Environmental Policy After the Lisbon Treaty”, *Environmental Policy in the EU*, Ed. Andrew Jordan, Camilla Adelle, London, Routledge. p.37.

Birtane, Ş. (2021). Özel Hayata Saygi Hakki (Aihş 8. Madde) Bağlamında Çalışma Hakki Ve Mesleki Hayat İlişkisi. *Anayasa Yargısı*, 38(2), p.57-97.

Bizer, K. & Julich, R. (1999). ‘Voluntary Agreements — Trick or Treat?’ *Journal of European Environmental Policy*, 9 (1), p.59-66.

Bızek V. (2013). Politika ta pravo ES z pitan’, shcho stosuyut’sya dovkillya: posibnik, Kıriv, <http://www.greenmind.com.ua/images/meropriyatiya/EC-LEG-Textbook-UA.pdf> (Access date: 03.08.2023).

Bodansky, D. (2001). The History of the Global Climate Change Regime. *International Relations and Global Climate Change*, 23(23), p.505.

Borkey, P., & Lévêque, F. (2000). Voluntary approaches for environmental protection in the European Union—a survey. *European Environment*, 10(1), 35-54.

Booth, K. (1991). Security and Emancipation. *Review of International Studies* 17(4): p.29-297.

Borrell, J. & Hoyer, W. (2021). Europe Must Become a Global Climate Power. *Project Syndicate*, p.22.

Bouwer, K. (2020). Lessons from a distorted metaphor: the holy grail of climate litigation. *Transnational Environmental Law*, 9(2), 347-378.

Bovend’Eert, P. (2022). The Urgenda Climate Case in the Netherlands: Separation of Powers and the Rule of Law. *Taiwan Law Review*, p.327.

Brauch, H. G. (2008). Güvenliğin yeniden kavramsallaştırılması: Barış, güvenlik, kalkınma ve çevre kavramsal dörtlüsü. *Uluslararası İlişkiler Dergisi*, 5(18), 1-47.

Brown, L. R. (1977). Redefining National Security. *Worldwatch Paper* p.14.

Brown, L. R. (2006). Dünyayı Nasıl Tükettik. İmre, M.F. (Çev.) İstanbul: İş Bankası Kültür Yayınları.

Busby, J. (2007). Climate Change and National Security: An Agenda for Action. New York: Council on Foreign Relations.

Buzan, B. (1991). People, States and Fear: An Agenda for International Security Studies in the Post-Cold War Era. 1st Edition 1981, 2nd Edition . Hertfordshire: Harvester Wheatsheaf.

Buzan, B. (1991). "New Patterns of Global Security in the Twenty-First Century." International Affairs (Royal Institute of International Affairs 1944-) p. 430-451.

Büyükşahin, F. (2018). Antropojenik Etkiler ile Havanın Kirletilmesi ve İklim Değişikliği. Uluslararası İnsan Çalışmaları Dergisi, 1.1, p.14-26.

Cameron P. D. (2008). History of Climate Change Law and Policy, Climate Change- A Guide to Carbon Law and Practice, (Ed.) Paul Q Watchman, Globe Law and Business, p.36

Carson, R. (1962). Silent Spring. Harmondshire: Penguin.

Cavdar, S. (2002). Küresel Isınma. ODTÜ Çevre Topluluğu. <http://www.cevre.metu.edu.tr/node/85> (Access date: 16.06.2023)

CEC (1992) Towards Sustainability: a European Community Programme of Policy and Action in Relation to the Environment and Sustainable Development, Brussels. <https://wayback.archive-it.org/12090/20230310090849/https://ec.europa.eu/environment/archives/action-programme/env-act5/pdf/5eap.pdf> (Access date: 24.06.2023)

Cepel, N. & Ergün, C. (2010). Suyun Önemi ve Ekolojik Sorunlar. Tema Vakfı Veri Tabanı. <http://www.tema.org.tr/Sayfalar/CevreKutuphanesi/SuKaynaklari.html> (Access date: 10.04.2023)

Climate Change Science | US EPA. (2023). US EPA. <https://www.epa.gov/climatechange-science> (Access date: 24.05.2023)

Commission on Human Security. (2003). Human security now :: protecting and empowering people /: Commission on Human Security. United Nations Digital Library System. <https://digitallibrary.un.org/record/503749> (Access date: 28.06.2023)

Convention on the Rights of the Child. (n.d.). UNICEF. <https://www.unicef.org/child-rights-convention> (Access date: 05.05.2023).

Council Conclusions on Economic Aspects of EU Energy and Climate Change Issues, Council of the European Union, 3088th Economic and Financial Affairs Council meeting, Brussels, 17 May 2011, pp.1-3. [https://ec.europa.eu/smart-regulation/impact/ia\\_carried\\_out/docs/ia\\_2011/sec\\_2011\\_1565\\_en.pdf](https://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2011/sec_2011_1565_en.pdf) (Access date: 15.06.2023)

Council, E. U. (2018). Council Conclusions on Climate Diplomacy. Brussels (6125/18). Available online at <https://data.consilium.europa.eu/doc/document/ST-6125-2018-INIT/en/pdf> (Access date: 17.06.2023)

Council of European Union (2005) “Joint Declaration on Climate Change between China and the European Union”, 12009/05 (Presse 226), Brussels, p.1-7. <https://www.ideo.ceu.es/Portals/0/Publicaciones/Political-Dialogue-in-EU-China-Relations.pdf> (Access date: 27.07.2023)

Council of the European Union (2005) “Information Note”, 7242/05, Brussels, p.1- 5. <https://core.ac.uk/download/pdf/148848146.pdf> (Access date: 03.08.2023)

“Cover Note”, Council of the European Union, 7224/1/07, Brussels, 2 May 2007, p.2. [https://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/ec/93135.pdf](https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/93135.pdf) (Access date: 14.07.2023)

Cummings, R., McKee, M. & Taylor, L. (2001). ‘To Whisper in The Ears of Princes: Laboratory Economic Experiments and Environmental Policy,’ in H. Folmer, H.L. Gabel, S.Gerking and A. Rose (Eds) *Frontiers of Environmental Economics*, Cheltenham: Edward Elgar, p.121-47.

Dara, C. (2012). Climate Vulnerability monitor-A guide to the cold calculus of a hot planet. In DARA and Climate Vulnerable Forum,: Madrid, Spain.

Demir, A. (2009). Kuresel İklim Degisikliginin Biyolojik Cesitlilik ve Ekosistem Kaynakları Uzerine Etkisi. *Ankara Universitesi Cevre Bilimleri Dergisi*, 1.

Deudney, D. (1995). “The Case Against Linking Environmental Degradation and National Security,” *Millennium*, 19:3, p. 461-476.

De Wilde, J. (1991). *Saved from Oblivion: Interdependence Theory in the First Half of the 20th Century: A Study on the Causality Between War and Complex Interdependence*. Dartmouth: Aldershot.

Dinç, C. (2019). *Avrupa Birliđi: Kimlik, Siyaset, Ekonomi, Geniřleme* (1. Basım). Ankara: Seçkin Yayınları.

Duarte Agostinho and Others v. Portugal and 32 Other States - Climate Change Litigation. (2022, October 28). *Climate Change Litigation*. <https://climatecasechart.com/non-us-case/youth-for-climate-justice-v-austria-et-al/> (Access date: 05.09.2023)

Duru B. (2003). “Avrupa Birliđi Çevre Politikası”, Avrupa Birliđi Politikaları, Der. Çađrı Erhan, Deniz Senemođlu, Ankara, İmaj Yayınevi, 2007. <http://kentcevre.politics.ankara.edu.tr/duruabcevre.pdf>, (27/03/2013), p.2.

EEAS (2020). “Climate Change and Defence Roadmap,”. <https://data.consilium.europa.eu/doc/document/ST-12741-2020-INIT/en/pdf>. (Access date: 02.08.2023)

Egea, R. M. F. (2021). Jurisprudencia Ambiental Internacional. Revista Catalana de Dret Ambiental, 12(2).

El-Hinnawi E. (1985). Environmental Refugees (Nairobi: United Nations Environment Programme).

Ekins, P. (1999). ‘European Environmental Taxes and Charges: Recent Experience, Issues and Trends,’ Ecological Economics, 31 (1), p.39-62.

Enarson, E. & Morrow, B. (1998). The Gendered Terrain of Disaster. New York: Praeger.

Enzler, S.M. (2011). Kyoto Policy Measures. Lenntech. <http://www.lenntech.com/greenhouse-effect/kyoto-policy-measures.html> (Access date: 24.07.2023)

Erdođan S. (2018). “İklim Deđişikliğine Karşı Verilen Küresel Mücadele ve Avrupa Birliđi”, Manas Sosyal Arařtırmalar Dergisi, cilt:7, sayı:4, p.716.

Erkul Kaya, N. (2021). İklim Degisikligi Sel Olasılıđını Artırıyor. *Anadolu Ajansı*.

Erlat, E. & Kayan, İ. (2008). İklim ve İklim Deđişmeleri. Bilim ve Teknik, 493, p.28-40.

Estes, J. A., Terborgh, J., Brashares, J. S., Power, M. E., Berger, J., Bond, W. J., ... & Wardle, D. A. (2011). Trophic Downgrading of planet Earth. Science, 333(6040), p.301-306.

Etty, T., Heyvaert, V., Carlarne, C., Huber, B., Peel, J. & van Zeben, J. (2020). “Transnational Environmental Law in a Transformed Environment”, in Transnational Environmental Law, Vol. 9, No. 2, p. 197–209.

EUR-LEX - 41987X1207 - EN - EUR-LEX. (n.d.). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A41987X1207> (Access date: 18.06.2023)

EUR-LEX - 32013D1386 - EN - EUR-LEX. (n.d.). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013D1386> (Access date: 12.07.2023)

EUR-LEX - 52001DC0031 - EN - EUR-LEX. (n.d.). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A52001DC0031> (Access date:02.07.2023)



EUR-LEX - 32001L0042 - EN - EUR-LEX. (n.d.). <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32001L0042> (Access date: 08.08.2023)

EUR-LEX - 41973X1220 - EN - EUR-LEX. (n.d.). <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A41973X1220>

European Commission (2019). “The European Green Deal”. [https://ec.europa.eu/info/sites/default/files/european-green-deal-communication\\_en.pdf](https://ec.europa.eu/info/sites/default/files/european-green-deal-communication_en.pdf). (Access date: 10.08.2023)

European Convention on Human Rights - ECHR Official Texts - ECHR - ECHR / CEDH. (n.d.). ECHR. <https://www.echr.coe.int/european-convention-on-human-rights> (Access date: 10.05.2023)

European Court of Human Rights (2020). “Court Communication of Case to Defendant Countries”. <https://climatecasechart.com/non-us-case/youth-for-climate-justice-v-austria-etal/#:~:text=On%20November%2030%2C%202020%2C%20The,the%20end%20of%20February%202021.> (Access date: 02.08.2023)

European Court of Human Rights (2023). “Requete no 39371/20 Duarte Agostinho et autres c. Portugal et autres”. [http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2021/20210204\\_3937120\\_decision.pdf](http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2021/20210204_3937120_decision.pdf). (Access date: 24.07.2023)

Fenton, R. and Hanley, N. (1995). ‘Economic Instruments and Waste Minimization: the Need for Siscard-relevant and Purchase-Relevant Instruments,’ *Environment and Planning*, 27 (8), p.28-131.

Ferris, E. (2020). Research on Climate Change and Migration Where Are We and Where Are We Going? *Migration Studies*, 8(4), 612-625.

Fetzek, S. & van Schaik, L. (2018). *Europe’s Responsibility to Prepare: Managing Climate Security Risks in A Changing World*. Center for Climate and Security, Clingendael & Planetary Security Initiative.

Fisher, E., Scotford, E. & Barritt, E. (2017). The legally disruptive nature of climate change. *The Modern Law Review*, 80(2), 173-201.

Friedberg, R. M., & Hunt, J. (2018). The impact of immigrants on host country wages, employment and growth. In *The New Immigrant in the American Economy* (pp. 89-110). Routledge.

Galka W. (2022). Apocalypse Now: Climate Change, Eco-anxiety and Art.3 ECHR's Prohibition of Degrading Treatment. <https://blogs.law.ox.ac.uk/oxford-university-undergraduate-law-journal-blog/blog-post/2022/12/apocalypse-now-climate-change> (Access date: 30.07.2023)

Galtung, J. (1971). "A Structural Theory of Imperialism," *Journal of Peace Research*, 8:2, p. 81-118.

Godrej, D. (2003). *Kuresel İklim Degisimi. (O. Kılıcdagı, Cev.) İstanbul: Metis Yayınları.*

Goldman, R. K. (2009). *History and Action: The Inter-American Human Rights System and the Role of the Inter-American Commission on Human Rights. Hum. Rts. Q., 31, p.856.*

Gundogan A. C., Bas D., Sayman R.U., Arikani Y. & Ozsoy G. (2015). "A'dan Z'ye İklim Degisikligi Basucu Rehberi", *Bölgesel Çevre Merkezi REC Türkiye.*

Güneş A. M. (2011). *Avrupa Birliđi Çevre Hukuku, On İki Levha Yayıncılık, İstanbul, 2011, p.20.*

Gusev A.A. (2012). *Ekologicheskaya politika Yevropeyskogo soyuza v kontekste kontseptsii ustoychivogo razvitiya, "Obozrevatel" No. 4*

Hahn, R.W. (1993). 'Getting More Environmental Protection for Less Money: A Practitioner's Guide,' *Oxford Review of Economic Policy*, 9 (4), p.112-23.

Hansen, L. G. (2005). *Aspects of the political economy of environmental voluntary agreements. In Springer eBooks (pp. 67–89). [https://doi.org/10.1007/1-4020-3356-7\\_4](https://doi.org/10.1007/1-4020-3356-7_4)*

Helm, D. (1998). 'The Assessment: Environmental Policy - Objectives, Instruments And Institutions,' *Oxford Review of Economic Policy*, 14 (4), p.1- 19.

Heri, C. (2020). *The ECtHR's Pending Climate Change Case: What's Ill-Treatment Got to Do with It?, EJIL. <https://www.ejiltalk.org/the-ecthrs-pending-climate-change-case-whats-ill-treatment-got-to-do-with-it/> (Access date: 24.07.2023)*

Hewitt, K. (1997). *Regions of Risk: A Geographical Introduction to Disasters. Essex: Longman.*

High Representative, and European Commission. (2008) *Climate Change and International Security. Paper from the High Representative and the European Commission to the European Council. [https://www.consilium.europa.eu/uedocs/cms\\_data/docs/pressdata/en/reports/99387.pdf](https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/reports/99387.pdf) (Access date: 27.07.2023)*

Homer-Dixon, T. (1991). "On the Threshold: Environmental Changes and Acute Conflict," *International Security*, 16:2, p. 76-116.

Hulme, M. (2016). *İklim Deđişikliđi Konusunda Neden Anlaşamıyoruz? (Çeviren: Merve Özenç). İstanbul: Alfa Yayınları.*

Humphreys, S. (Ed.). (2010). Human Rights and Climate Change. Cambridge University Press.

Ilık Bilben, M. S. (2018). Antropojenik İklim Degisikligi Baglamında Goc Tartismaları. *Sosyal Siyaset Konferansları Dergisi/Journal of Social Policy Conferences*, 75, p.237–268.

International Covenant on Civil and Political Rights (ICCPR) | Equality and Human Rights Commission. (n.d.). <https://www.equalityhumanrights.com/en/our-human-rights-work/monitoring-and-promoting-un-treaties/international-covenant-civil-and#:~:text=ICCPR%20is%20an%20international%20human,or%20degrading%20treatment%20or%20punishment> (Access date: 11.08.2023)

IPCC (2007) “Summary for Policymakers” in Climate Change 2007: The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, [S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)], (Cambridge: Cambridge University Press, 2007), p. 2, <http://www.ipcc.ch/ipccreports/ar4-wg1.htm> (Access date: 20.05.2023)

Jennings B. (2016). Ecological Governance: Toward a New Social Contract with the Earth, West Virginia University Press, Morgantown.

Jones, E. (1999). ‘Competitive and Sustainable Growth: Logic and Inconsistency,’ *Journal of European Public Policy*, 6 (3), p.75-224.

Juste Ruiz, J. (2020). The process towards a Global Pact for the Environment at the United Nations: From legal ambition to political dilution. *Review of European, Comparative & International Environmental Law*, 29(3), 479-490.

Kaçar, F. & Öztürk, K. (2017). Avrupa Birliği’nin Normatif Gücü: Kavramsal Bir İnceleme. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (28), p.359-370.

Kachuriner V.L. (2013). Stanovlennya ta rozvitok politiki Evropeys’kogo Soyuzu u sferı okhoroni navkolishn'ogo seredovishcha ta yekologichnikh standartıv virobnitstva, “Naukoviy vısnik Mı- zhnarodnogo gumanıarnogo unıversitetu” No. 5

Kadiođlu, M. (2007). 99 Sayfada Küresel İklim Deđişikliđi. İstanbul: Türkiye İş Bankası Kültür Yayınları.

Kahraman, A. A. (2022). Uluslararası Hukukta Yerli Halkların Statüsü ve Tanınan Haklar. *İnsan Hakları Yıllığı*, 39(1), p.35-54.

Kaplan, R. (1994). “The Coming Anarchy,” *Atlantic Monthly* (2), p.44-76.

Karan, U. & Gemalmaz, M. S. (2012). Uluslararası İnsan Hakları Hukuku Işığında Türk Hukukunda Ayrımcılık Yasađı.

Karl, T. R. & Trenberth, K. E. (2003). "Modern Global Climate Change", *Science*, Vol. 302, p.1719–1723.

Katwala, A. (2018). The Spiralling Environmental Cost of Our Lithium Battery Addiction. *Wired UK*, p.5.

Kaya, H. E. (2020). Kyoto'dan Paris'e Kuresel Iklim Politikaları. *Meriç Uluslararası Sosyal ve Stratejik Arastirmalar Dergisi*, 4(10), p.165-191.

Keane, D. (2004). "The Environmental Causes and Consequences of Migration: A Search for the Meaning of 'Environmental Refugees'." In: *Georgetown International Environmental Law Review* 16 (2): p.208–221.

Keay-Bright, S. (2000). A Critical Analysis of the Voluntary Fuel Agreements, Established Between the Automobile Industry and the European Commission, With Regard for Their Capacity to Protect the Environment, Document no.2000/ 021, Brussels: European Environmental Bureau.

Keller, H. & Heri, C. (2022). The Future is Now: Climate Cases Before the ECtHR. *Nordic Journal of Human Rights*, 40(1), p.153-174.

Kerr P. (2013). "Human Security", Collins, A. (ed), *Contemporary Security Studies*, Oxford: Oxford University.

Kettle, N. P. & Dow, K. (2016). The Role of Perceived Risk, Uncertainty, and Trust on Coastal Climate Change Adaptation Planning. *Environment and Behavior*, 48(4), p.579-606.

Keturakienė, A. & Murauskas, D. (2023). Climate Change and Human Rights: the First Cases Before the European Court of Human Rights. *Teisė*, 126, p.38-55.

Kiehl, J.T. & Trenberth, K. E. (1997). Earth's Annual Global Mean Energy Budget. National Center for Atmospheric Research. <http://www.atmo.arizona.edu/students/courselinks/spring04/atmo451b/pdf/RadiationBudget.pdf> (Access date: 24.08.2023)

Knill C. (2010). "The Establishment of EU Environmental Policy", *Environmental Policy in the EU*, Ed. Andrew Jordan, Camilla Adelle, London, Routledge, 2013, p.13.

Knox J. H. & Pajan R. (2018). *The Human Right to a Healthy Environment*, Cambridge University Press, Cambridge, p. 1.

Koçak, K. (2009). İklim Değişiminde İnsan Faktörü. İTÜ Meteoroloji Bölümü.

Korkmaz, K. (2007). Küresel Isınma ve Tarımsal Uygulamalara Etkisi. *Alatırım*, 6 (2), p.43-49.

Kovel, J. (2005). *Doğanın Düşmanı: Kapitalizmin Sonu mu, Dünyanın Sonu mu?*. G. Koca (Çev.). İstanbul: Metis Yayınları.

Kurnaz, L. (2019). *Son Buzul Erimeden: İklim Değişikliği Hakkında Öğrenmek İstedğiniz Her Şey*. Doğan Kitap.

Kyoto Protocol flexibility mechanisms - DCCEEW. (2022). [https://www.dcceew.gov.au/climate-change/international-commitments/kyoto-protocol-flexibility-mechanisms#:~:text=The%20Clean%20Development%20Mechanism%20\(CDM,of%20where%20they%20are%20reduced.](https://www.dcceew.gov.au/climate-change/international-commitments/kyoto-protocol-flexibility-mechanisms#:~:text=The%20Clean%20Development%20Mechanism%20(CDM,of%20where%20they%20are%20reduced.) (Access date: 14.07.2023)

Landsberg, H. E. (1970). Man-made climatic changes: man's activities have altered the climate of urbanized areas and may affect global climate in the future. *Science*, 170(3964), 1265-1274.

Lazard, O. & Youngs, R. (2021). *The EU and Climate Security: Toward Ecological Diplomacy*. Carnegie Europe, p.12-68.

Leffler, M. P. (1992). *A preponderance of power: National security, the Truman administration, and the Cold War*. Stanford University Press.

Leijten, I. (2019). Human Rights v. Insufficient Climate Action: The Urgenda Case. *Netherlands Quarterly of Human Rights*, 37(2), p.112-118.

Lemaitre, P. (1989). Eastern Reform Processes and the Policy of the West. *Journal of peace research*, 26(4), 337-340.

Lenschow A. (2010). "Environmental Policy", *Policy Making in the European Union*, Ed. Helen Wallace, William Wallace, Great Britain, Oxford University Press, p. 309.

Marazziti, D., Cianconi, P., Mucci, F., Foresi, L., Chiarantini, I. & Della Vecchia, A. (2021). Climate Change, Environment Pollution, Covid-19 Pandemic And Mental Health. *Science of the Total Environment*, 773, p.145-182.

Martín, M. B. G. (2005). Weather, climate and tourism a geographical perspective. *Annals of tourism research*, 32(3), 571-591.

Martinez, E. (2020). *Understanding the Connections: An Analysis of Climate Change and Human Security* (Doctoral dissertation, The University of Texas at El Paso).

Maslin, M. (2009). *Global Warming: A Very Short Introduction*. Oxford: Oxford University Press.

Matthew, R., McDonald, B., Barnett, J. & O'Brien, K. (eds.) (2009). *Global Environmental Change and Human Security*. Cambridge, MA: MIT Press.

Mauri, F. (2022). *Climate Change Litigation and the Role of the Judiciary*.

- McKinlay, R. D. & Little, R. (1986). *Global Problems and World Order*. London: Pinter.
- Messer, E., Cohen, M. & Marchione, T. (2001). *Conflict: A Cause and Effect of Hunger*. Environmental Change and Security Project Report 7.
- Morgenthau, H. J. (1970). Changes and chances in American-Soviet relations. *Foreign Aff.*, 49, 429.
- Myers, N. (1993). *Ultimate Security—The Environmental Basis of Political Stability*. New York: W. W. Norton.
- Myers, N. & Kent, J. (1995). *Environmental Exodus. An Emergent Crisis in the Global Arena* (Washington, D.C.: Climate Institute).
- Myers, N. (2002). “Environmental Refugees: A Growing Phenomenon of the 21st Century”, in *Philosophical Transactions: Biological Sciences* 357 (1420): p.608–613.
- Myers, T. A., Nisbet, M. C., Maibach, E. W. & Leiserowitz, A. A. (2012). A Public Health Frame Arouses Hopeful Emotions About Climate Change: A Letter. *Climatic Change*, 113, p.1104-1112.
- National Research Council (1990) *Confronting Climate Change: Strategies for Energy Research and Development*. National Academies Press.
- Newman E. (2001). “Human Security and Constructivism”, *International Studies Perspectives*, 2(3), p.236-241.
- New York Declaration on Forests (NYDF) (2020). “Balancing Forests and Development: Addressing Infrastructure and Extractive Industries, Promoting Sustainable Livelihoods,” Progress Assessment of NYDF Goals 3 and 4. <https://forestdeclaration.org/home/balancing-forests-and-development>. (Access date: 29.08.2023)
- Nickel, J. W. (1993). The Human Right to a Safe Environment: Philosophical Perspectives on Its Scope and Justification. *Yale J. Int'l L.*, 18, p.281.
- Noolkaemper A. & Burgers L. (2020). A New Classic Climate Change Litigation: The Dutch Supreme Court Decision in the Urgenda Case, *EJIL*. <https://www.ejiltalk.org/a-new-classic-in-climate-change-litigation-the-dutch-supreme-court-decision-in-the-urgenda-case/> (Access Date: 22.07.2023)
- Noonan, D. (2022). Achieving the 1.5° C Limit of the Paris Agreement: An Assessment of the Adequacy of the Mitigation Measures and Targets of the Respondent States in *Duarte Agostinho v Portugal and 32 other States*.
- North, D. C. (2007). *Limited access orders in the developing world: A new approach to the problems of development* (Vol. 4359). World Bank Publications.

O'Brien, K. (2006). Are We Missing the Point? Global Environmental Change as an Issue of Human Security. *Global Environmental Change* 16(1).

Onay, Y. (2002). Soğuk Savaş Sonrası Düzenin Getirdiklerinin Türkiye Jeopolitiğine Yansımaları ve Tehditlerin Farklılaşması. *Jeopolitik Dergisi*. Çantay Basımevi. (1), p.4.

Ondoua, G., Beodo Moundjim, E., Mambo Marindo, J. C., Jiagho, R., Usongo, L. & Williamson, E. A. (2017). An Assessment of Poaching and Wildlife Trafficking in the Garamba-Bili-Chinko Transboundary landscape Traffic.

Özalp, N. Y. (2013). Çevresel Haklara İnsan Hakları Avrupa Mahkemesi Yaklaşımı.

Paiement, P. (2021). Urgent Agenda: How Climate Litigation Builds Transnational Narratives. In *Transnational Environmental Law in the Anthropocene* (pp. 121-143). Routledge.

Pallemaerts M. (1997). "Stockholm'den Rio'ya Uluslararası Çevre Hukuku: Geleceğe Doğru Geri Adım Mı?", *Ankara Üniversitesi SBF Dergisi*, cilt: 52, vol: 1. p.615-625.

Pallemaerts, M. & Williams, R. (2006). "Climate Change: The International and European Policy Framework", in Marjan Peeters and Kurt Deketelaere (eds.), *EU Climate Change Policy: The Challenge of new Regulatory Initiatives*, Edward Elgar Publishing, Northampton, p.45.

Parker L. (2006). "Climate Change: The European Union's Emissions Trading System (EU-ETS)", *CRS Report for Congress*, p.1-2.

Parry, M. L., Canziani, O. F., Palutikof, J. P., Van Der Linden P. J. & Hanson, C. E. (eds.) (2007). *Climate Change 2007: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.

Pasquini, L. & Shearing, C. (2014). Municipalities, Politics, and Climate Change: An Example of the Process of Institutionalizing an Environmental Agenda within Local Government. *Journal of Environment and Development*, p.23

Pearce, D. W. & Barbier, E. (2000). *Blueprint for a Sustainable Economy*. Earthscan. p.7

Peluso, N., Humphrey, C. & Fortmann, L. (1994) *The Rock, the Beach and the Tidal Pool: People and Poverty in Natural Resource-dependent Areas*. *Society and Natural Resources* 7 (1).

PIF (Pacific Islands Forum) (2009). *Forum Communique 2009*. Fortieth Pacific Islands Forum, Cairns, Australia, 5–6 August. Available at <http://www.pif2009.org.au/> (Access date:25.06 2023)

Pittock, A. B. (2017). *Climate Change: Turning Up the Heat*. Routledge.



Porter, G. & Brown, J. W. (1991). *Global Environmental Politics*. Boulder: Westview Press.

Pringle, P., Karali, E., Klostermann, J. E. M., Mäkinen, K., Prutsch, A., Hildén, M., ... & MCallum, S. (2015). *National Monitoring, Reporting and Evaluation of Climate Change Adaptation in Europe* (No. 20/2015).

Prokhorenko K.O. (2012). Pravove zabezpechennya okhoroni klimatu v Evropeys'komu soyuzi, "Vіsник Kiivs'kogo natsional'nogo universitetu imeni Tarasa Shevchenka" No. 92

Publications Office of the European Union. (2017). *White paper on the future of Europe: reflections and scenarios for the EU27 by 2025*. Publications Office of the EU. <https://op.europa.eu/en/publication-detail/-/publication/ba81f70e-2b10-11e7-9412-01aa75ed71a1/language-en> (Access date: 21.04.2023)

Pugachev A.V. (2014). Ekologicheskaya politika v nekotorykh yevropeyskikh stranakh: razlich- nye podkhody, "Vestnik Kemerovskogo gosudarstvennogo universiteta", No. 3 (59), Vol. 1 (59)

Rayner, T. & Jordan, A. (2016). *Climate Change Policy in the European Union*. In *Oxford Research Encyclopedia of Climate Science*. p. 27-69.

Reardon, S. (2016). A Mouse's House May Ruin Studies: Environmental Factors Lie Behind Many Irreproducible Rodent Experiments. *Nature*, 530(7590), p.264-265.

Renewable Energy Sources and Climate Change Mitigation — IPCC. (n.d.). IPCC. <https://www.ipcc.ch/report/renewable-energy-sources-and-climate-change-mitigation/> (Access date: 13.05.2023)

Rodriguez-Garavito, C. (2021). *Litigating the Climate Emergency: The Global Rise of Human Rights-Based Litigation for Climate Action*. *Litigating the Climate Emergency: How Human Rights, Courts, and Legal Mobilization Can Bolster Climate Action!*(Cambridge Univ. Press, Forthcoming).

Rothenberg D. (1989). "Introduction: Ecosophy T – from intuition to system", in Naess A., *Ecology, Community and Lifestyle*, Cambridge University Press, Cambridge, p. 2.

Sachs, J., Kroll, C., Lafortune, G., Fuller, G. & Woelm, F. (2022). *Sustainable Development Report 2022*. Cambridge University Press.

Saiger, A. J. (2020). "Domestic Courts and the Paris Agreement's Climate Goals: The Need for a Comparative Approach", in *Transnational Environmental Law*, Vol. 9, No. 1, p. 37– 54.

Secretary-General, U. (2009, September 11). *Climate change and its possible security implications :: report of the Secretary-General*. United Nations Digital Library System. <https://digitallibrary.un.org/record/667264> (Access date: 07.07.2023)



Segerson, K. (1996). 'Issues in the Choice of Environmental Policy Instruments,' in J. Braden, H. Folmer and T.S. Ulen (1996) *Environmental policy with political integration: the European Union and the United States*, Cheltenham: Edward Elgar, 149-74.

Segerson, K. & Micelli, T.J. (1998). 'Voluntary Environmental Agreements: Good or Bad News for Environmental Protection?' *Journal of Environmental Economics and Management*, 36 (2), p.30-110.

Selchow, S. (2016). The Construction of "European security" in The European Union in a Changing Global Environment: a Systematic Analysis. *European security*, 25(3), p.281-303.

Sevim, C. (2011). Enerji Teknolojilerindeki Anlayış Model Değişimi ve Hızlı İklim Değişikliği. *Journal of Yasar University*, 21(6), p.351-352.

Seyhun D. & Mutlu T. (2011). "Küresel İklim Değişikliği ile Mücadele: Genel Yaklaşımlar ve Uluslararası Cabalar", *Istanbul Journal of Sociological Studies*, vol: 44, p.159-160.

Shelton D. (2012). "Human rights and the environment", in Daya-Winterbottom T. (ed.) *The Salmon Lectures: Justice and the Environment* (2nd edn), Thomson Reuters, Wellington, p. 6-7.

Sindico, F. (2007). Climate Change: A Security (Council) Issue. *Carbon & Climate L. Rev.*, p.29.

Singh, U. (2019). Changing Climate Ethics: Kyoto Protocol to Paris Agreement. *FPRC Journal*, 2, p.77-95.

Sjursen, H. (2006). What Kind of Power? *Journal of European Public Policy*, 13 (2), p. 169-181.

Soroos, M. S. (1994). Global Change, Environmental Security, and the Prisoner's Dilemma. *Journal Of Peace Research*, 31(3), p.317-332.

Spence, C. (2007). *Küresel Isınma, Sağlıklı Bir Dünya İçin Çözümler*. S. Gönen, S. Ağar (Çev). İstanbul: Pegasus Yayınları

Streimikiene, D. & Balezentis, T. (2013). Multi-Objective Ranking of Climate Change Mitigation Policies and Measures in Lithuania. *Renewable and Sustainable Energy Reviews*, 18, p.144-153.

Tan, M. (2019). Tüketim Kültürü Bağlamında İstek ve İhtiyaçların Oluşumu: Kavramsal Bir Analiz. *Fırat Üniversitesi Uluslararası İktisadi ve İdari Bilimler Dergisi*, 3(2), p.193-218. <https://dergipark.org.tr/en/pub/fuuiibfdergi/issue/51484/668261> (Access date:17.05.2023).

Tenente, M., Henriques, C. & da Silva, P. P. (2020). Eco-Efficiency Assessment of the Electricity Sector: Evidence from 28 European Union countries. *Economic Analysis and Policy*, 66, 293-314.

The High Representative and the European Commission to the European Council (2008) "Climate Change and International Security", p.1-6. <https://data.consilium.europa.eu/doc/document/ST-8617-2008-INIT/en/pdf> (Access date: 27.07.2023)

The World Bank (2010). *World Development Report: Development and Climate Change*. p. 5.

Thompson, B. C. (2016). The European Union's Human Security Discourse: Conceptualization and Justification. *The Korean Journal of International Studies*, 14(1), p.161-188.

Türkeş, M. (2007). *İklim Değişikliği 12 Temel Soru* (1. Basım). Ankara: Emo Yayınları.

Turkes M. (2008). "Küresel İklim Değişikliği Nedir? Temel Kavramlar, Nedenleri, Gözlenen Ve Öngörülen Değişiklikler", *İklim Değişikliği ve Çevre*, vol: 1. p. 26-37.

UNDP (United Nations Development Program) (1994) *Human Development Report 1994*. New York: Oxford University Press. <https://hdr.undp.org/system/files/documents/hdr1994encompletenostatpdf.pdf> (Access date: 24.06.2023)

UNEP (1972) "Declaration of the United Nations Conference on the Human Environment". <https://legal.un.org/avl/ha/dunche/dunche.html> (Access date: 29.05.2023)

UNEP (2015) *Climate Change and Human Rights*. p. 27. [https://wedocs.unep.org/bitstream/handle/20.500.11822/9530/-Climate\\_Change\\_and\\_Human\\_Rightshuman-rights-climate-change.pdf.pdf](https://wedocs.unep.org/bitstream/handle/20.500.11822/9530/-Climate_Change_and_Human_Rightshuman-rights-climate-change.pdf.pdf) (Access date: 01.06.2023)

UNFCCC (2007) *Climate Change: Impacts, Vulnerabilities and Adaptation in Developing Countries*. p. 16. <https://unfccc.int/resource/docs/publications/impacts.pdf> (Access date: 01.06.2023)

UNFCCC, "What is the United Nations Framework Convention on Climate Change?", [https://unfccc.int/kyoto\\_protocol#:~:text=In%20short%2C%20the%20Kyoto%20Protocol,accordance%20with%20agreed%20individual%20targets](https://unfccc.int/kyoto_protocol#:~:text=In%20short%2C%20the%20Kyoto%20Protocol,accordance%20with%20agreed%20individual%20targets). (Access Date: 18.05.2023).

United Nations. (n.d.). *United Nations Conference on the Human Environment, Stockholm 1972* | United Nations. <https://www.un.org/en/conferences/environment/stockholm1972> (Access date: 21.07.2023)

United Nations (1948). Universal Declaration of Human Rights | United Nations. <https://www.un.org/en/about-us/universal-declaration-of-human-rights> (Access date: 04.05.2023)

United Nations (1992) United Nations Framework Convention on Climate Change – Article 2. Available at: <https://unfccc.int/resource/ccsites/zimbab/conven/text/art01.htm> (Access date:12.08.2023).

United Nations General Assembly (1992) “Report of the United Nations Conference on Environment and Development”, A/CONF.151-26, Volume: I, Rio de Janeiro, v.1. 66, p.2. (Access date: 23.06.2023)

Vadén, T., Lähde, V., Majava, A., Järvensivu, P., Toivanen, T., Hakala, E. & Eronen, J. T. (2020). Decoupling for Ecological Sustainability.

Van Schaik L. & Schunz, S. (2012). “Explaining EU Activism and Impact in Global Climate Change Politics: Is the Union a Norm- or Interest-Driven Actor? in JCMS, Vol.50, No:1, p.179-180.

Van Zeben, J. (2015). Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide? *Transnational Environmental Law*, 4(2), p.339-357.

Vogler J. (2003). “The External Environmental Policy of the European Union”, *Yearbook of International Cooperation on Environment and Development 2003/04*, Ed. Olav Schram Stokke, Øystein B. Thommessen, London, Earthscan, 2003, p.65.

Vogler, John (2011). *The European Union as a Global Environmental Policy Actor, Climate Change*. (Editörler: Rüdiger K. W. Wurzel ve James Connelly) *The European Union as a Leader in International Climate Change Politics*, Londra ve New York: : Roudledge / UACES p.21-37.

Voigt, C. (2021). The First Climate Judgment Before the Norwegian Supreme Court: Aligning Law with Politics. *Journal of Environmental Law*, 33(3), p.697-710.

Volger, J. (2002). The European Union and the “Securitization” of the Environment. *Human Security and the Environment*, p.179-198.

Vogler, J. (2009). “Climate Change and the EU Foreign Policy: The Negotiation of Burden Sharing”, in *International Politics*, Vol.46, Number 4, p.469.

Von Bogdandy, A. (2000). The European Union as a Human Rights Organization? Human rights and the Core of the European Union. *Common Market Law Review*, 37(6).

Voulvoulis, N., Arpon, K. D. & Giakoumis, T. (2017). The EU Water Framework Directive: From Great Expectations to Problems with Implementation. *Science of the Total Environment*, 575, p.358-366.

Walker, G. & King, D. (2010). Dünyamız Isınmıyor. Küresel ısınmayla Nasıl Başa Çıkabiliriz?

Watson, A. (1992). The Evolution of International Society. London: Routledge. WCED (World Commission on Environment and Development) Our Common Future. Oxford: Oxford University Press.

Wæver, O., Buzan, B., Kelstrup, M. & Lemaitre P. (1993). Identity Migration and the New Security Order in Europe. London: Pinter.

Wæver O., Egbert, J. & Lemaitre, P. (1987). Concepts of Security: Problems of Research on Non-Military Aspects. Copenhagen Papers no. 1. Copenhagen: Centre for Peace and Conflict Research.

WCED, S. W. S. (1987). World Commission on Environment and Development. *Our Common Future*, 17(1), p.1-91.

Weart, S. (2008). The Discovery of Global Warming. American Institute of Physics. <http://www.aip.org/history/climate/co2.htm> (Access date: 04.04.2023)

Wegener, L. (2020). “Can the Paris Agreement Help Climate Change Litigation and Vice Versa?”, in *Transnational Environmental Law*, Vol. 9, No. 1, pp. 17-26.

Weston B. H. & Bollier D. (2014). *Green Governance: Ecological Survival, Human Rights, and the Law of the Commons*, Cambridge University Press, Cambridge.

WMO, UNEP (1985) “Report of the International Conference on the Assessment of the Role of Carbon Dioxide and of Other Greenhouse Gases In Climate Variations and Associated Impacts”, No: 661, Villach- Austria. <http://scinet.science.ph/union/ShowSearchResult.php?s=2&f=&p=&x=&page=&sid=1&id=Report+of+the+international+conference+on+the+assessment+of+the+role+of+carbon+dioxide+and+of+other+greenhouse+gases+in+climate+variations+and+associated+impacts&Mtype=BOOKS> (Access date: 06.07.2023)

WMO (1988) “Conference Documents and Reports, The Changing Atmosphere-Implications for Global Security Conference Statement”, p.292-293. <https://wedocs.unep.org/handle/20.500.11822/29980> (Access date: 17.05.2023)

World Meteorological Organization (2017). A history of climate activities. <https://public.wmo.int/en/bulletin/history-climate-activities> (Erisim Tarihi: 02/04/2023).

WWF (2014). IPCC 5. Degerlendirme Raporu Aciklandi. <https://www.wwf.org.tr/?2340/IPCC5degerlendirmeraporuaciklandi> (Access date: 02.07.2023)

Yıldırım, A. & Simsek, H. (1999). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri* (11 baski: 1999-2018).

Yoro, K. O. & Daramola, M. O. (2020). CO2 Emission Sources, Greenhouse Gases, and The Global Warming Effect. In *Advances in Carbon Capture*. Woodhead Publishing. P.3-28.

Young, Davis A. (1995). The Biblical Flood: a Case Study of the Church's Response to Extrabiblical Evidence. <http://www.bringyou.to/apologetics/p82.htm> (Access date: 12.06.2023).

Zemp, M. (2008). *Global Glacier Changes: Facts and Figures*. UNEP/Earthprint.

Zwolski, K. & Kaunert, C. (2011). The EU and Climate Security: A Case of Successful Norm Entrepreneurship? *European security*, 20(1), p.21-43.