

INTERNATIONAL CLIMATE CHANGE POLICIES OF TÜRKİYE IN ITS 100TH YEAR

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Abstract

Climate change has escalated into a global crisis requiring urgent attention from all countries. While some regions and nations, labelled as vulnerable, experience the profound impacts of this crisis more intensely, it's essential to note that those responsible for causing climate change and those negatively affected by its consequences might not be the same. Regardless of these differences, global measures are crucial to effectively address the crisis. In this context, the international community, led by the United Nations, has taken concrete steps to tackle climate change. Initiated with the United Nations Framework Convention on Climate Change, the process led to the establishment of the three crucial pillars with the Kyoto Protocol and the Paris Agreement. Türkiye, being a country located within the Mediterranean basin, is among those most acutely affected by the impacts of climate change. Despite its recent efforts such as ratification of the Paris Agreement and updating its nationally determined contribution, Türkiye's continued reliance on fossil fuels indicates a misalignment with sustainability goals. Despite the strides taken, the fact that Türkiye has not yet shifted towards renewable energy sources due to its fossil fuel-based policies suggests that there is still a long way to go. Therefore, the study explores how Türkiye can harmonize with international climate policies by enacting a climate law and implementing mitigation and adaptation efforts on its journey towards net zero carbon emissions by its centennial year.

Keywords: *Climate Change, International Climate Policies, Paris Agreement, Zero Carbon Emissions, Nationally Determined Contributions (NDC).*

TÜRKİYE'NİN 100. YILINDA ULUSLARARASI İKLİM POLİTİKALARI

Öz

İklim değişikliği küresel düzeyde acil hassasiyet gerektiren ve tüm ülkelerin önlem alması gereken bir kriz haline gelmiştir. Kırılgan olarak nitelendirilen bazı coğrafyalar ve ülkeler iklim krizinin etkilerini daha derin hissetmekte ve sonuçlarıyla daha ağır bir şekilde yüzleşmektedirler. İklim krizinden sorumlu olanlar ve iklim krizinin etkilerinden olumsuz etkilenen aynı kümede olmamasına karşın iklim krizine karşı alınacak önlemlerin küresel olması elzemdir. Bu doğrultuda uluslararası anlamda Birleşmiş Milletler öncülüğünde iklim değişikliği gündeme alınmış ve somut

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adımlar atılmaya başlanmıştır. Birleşmiş Milletler İklim Değişikliği Çerçeve Sözleşmesiyle başlayan süreç Kyoto Protokolü ve Paris Anlaşması'yla en önemli üçlü sac ayağının kurulmasını beraberinde getirmiştir. Türkiye Akdeniz havzasında yer alan bir ülke olarak iklim değişikliğinin etkilerini en derinden hisseden ülkelerin başında gelmektedir. Yakın zamanlarda Paris Anlaşmasını imzalayarak yürürlüğe koyan ve katkı beyanını güncelleyen Türkiye 2053 yılı için sıfır karbon bir ülke olma hedefinde olduğunu beyan etmiştir. Türkiye'nin uluslararası iklim politikalarının tarihsel süreçten günümüze değin nasıl şekillendiği çalışmada ele alınmıştır. Atılan adımlara karşın Türkiye'nin fosil yakıtı dayalı politikaları ile yenilenebilir enerji kaynaklarına henüz yönelememiş olması ise hedefinden uzak olduğu sonucuna varılmıştır. Bu doğrultuda Türkiye'nin yüzüncü yılında iklim yasasını çıkarıp, sıfır karbon bir ülke olma yolundaki uygulaması gereken azaltma ve uyum çalışmalarıyla uluslararası iklim politikalarına nasıl uyumlu hale gelebileceğine çalışmada yer verilmiştir.

Anahtar Kelimeler: İklim Değişikliği, Uluslararası İklim Politikaları, Paris Anlaşması, Sıfır Karbon Emisyonu, Ulusal Katkı Beyanı.

Introduction

Climate change is a complex and global issue rooted in societal inequalities that exacerbate the frequency, intensity, spatial extent, duration, and timing of adverse weather and climate events worldwide. Triggered by interconnected and global networks in energy, trade, finance sectors, and technological dependencies, climate change disproportionately impacts developing countries. In these nations, the convergence of daily lives of people living in poverty and vulnerabilities of disadvantaged groups escalates the problem to unprecedented levels. Interactions and effects transcend communities, extend beyond economic boundaries, and cross administrative or national borders. Due to its multifaceted, long-term, and nonlinear impacts across all systems, the risk can no longer be addressed in isolation, necessitating a global effort. As climate change consequences affect all countries, regardless of wealth disparities between them, a global endeavour becomes imperative. Climate change policies developed to combat this issue encompass specifically formulated approaches that can be local, national, or international in scope (Intergovernmental Panel on Climate Change [IPCC], 2023a, p. 55). Climate change policies are generally categorized into two groups: mitigation policies aimed at minimizing the dimensions of climate change, and adaptation policies that aim to reduce risks and capitalize on new opportunities resulting from climate change (World Wildlife Fund [WWF], 2023).

Combating climate change through mitigation and adaptation activities is also a very important issue for Türkiye, which is a developing country. The main reason for this is that Türkiye is one of the regions most affected by climate change. It is very important to examine the climate change policies developed in Türkiye from past to present. In this regard, the aim of this study

to analyse the success level of policies developed in the field of climate change from past to present in the 100th anniversary of the Republic of Türkiye. In this context, the research questions sought to be answered in the study are follows:

- What is the current status of climate change policies developed in Türkiye?
- In which areas should Türkiye's climate change policies improve for the future?

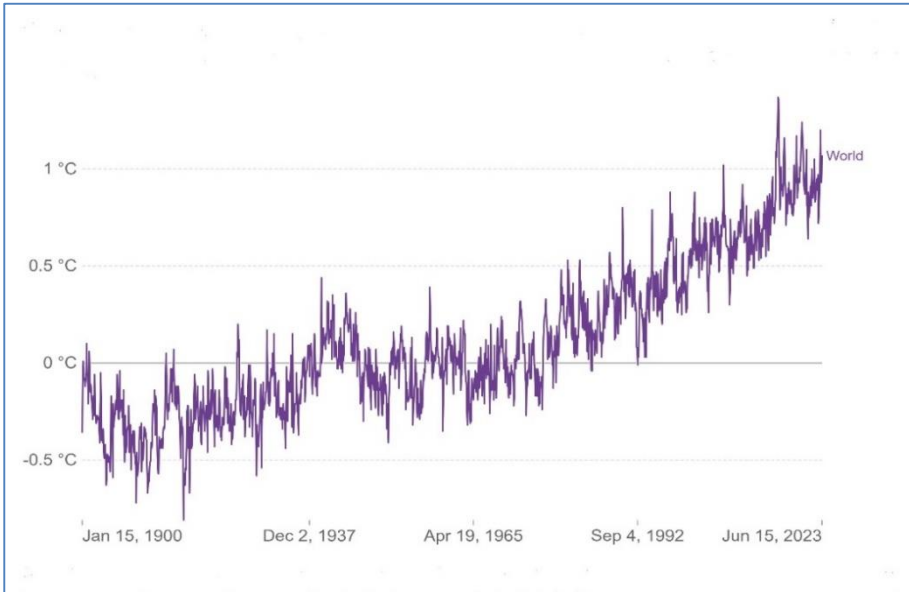
Multiple data sources were used in the study. Reports, statistics of national and international institutions and organizations and academic literature were used. The contribution of the study to the literature is that, although many academic studies have been conducted on Türkiye's climate change policies from past to present, this study focuses especially on the 2021-2023 period, when the climate policies in question began to be actively implemented internationally, and puts forward policy recommendations based on this.

1. CURRENT STATUS CLIMATE CHANGE IN THE WORLD AND IN TÜRKİYE

Climate change is a global issue that affects various aspects of the world, leading to severe consequences due to unsustainable human activities on the environment and societies. One of the primary causes of climate change is the excessive use of fossil fuels, which includes coal, oil, and natural gas. These resources increase the concentration of carbon dioxide and other greenhouse gases in the atmosphere. For over a century, the burning of fossil fuels, along with unequal and unsustainable energy and land usage, has resulted in temperatures already rising 1.1 °C above pre-industrial levels (IPCC, 2023b). This, in turn, raises the atmospheric temperature, giving rise to global warming.

In Figure 1, which includes monthly temperature changes from 1900 to 2023, it is seen that there has been an increase in the period approaching today throughout the world. Global warming manifests itself worldwide through various effects, such as rising sea levels, increased frequency of extreme weather events like hurricanes, floods, droughts and the melting of glaciers. It particularly affects agriculture and water resources. Droughts and water scarcity negatively impact agricultural production, leading to food insecurity. Climate change also exerts significant pressure on ecosystems. Some species may lose their habitats, and marine life can suffer from acidification and warming. Climate change can also contribute to health issues, including heatwaves and respiratory diseases. Social and economic impacts are evident as well. Climate-induced migration waves, competition for resources, and economic disparities can be triggered. The effects of climate change are interconnected and complex, influencing various facets of life on Earth.

Figure 1. Monthly Temperature Changes (1900-2023)



Source: Our World in Data, 2023.

Climate change is not a threat caused by a single actor. It is a crisis sustained by existing energy, transportation, agriculture, and resource utilization systems, and it can be assessed from multiple dimensions. Studies conducted worldwide indicate that the adverse effects of climate change have the potential to destabilize life at every level of the ecosystem. Projected scenarios predict that due to temperatures exceeding normal levels, nearly every region of the world could become uninhabitable. The decrease in crops and water resources is also expected to exert significant pressure on livelihoods. Given these conditions, it is imperative to assess climate change through the lens of security (The National Security, Military, and Intelligence Panel on Climate Change [NSMIP], 2020, p. 6). This is because the challenging circumstances may lead to the displacement of entire communities, waves of migration, political instability, and an increase in violence and conflicts.

If the necessary precautions are not taken against these natural events, the results can reach catastrophic proportions. The number of deaths caused by climate-related disasters can vary from year to year. However, looking at the average of the last decade, we can observe that approximately 45,000 people worldwide have lost their lives due to disasters. This corresponds to about 1% of the global deaths. Despite the variability in the number of deaths, shocking events have a global impact like droughts in Ethiopia from 1983 to 1985, the Cyclone Nargis in Myanmar in 2008, and similar incidents have led

to global disaster-related deaths exceeding 200,000 people (Our World in Data, 2023). The increase in extreme heat, changes in precipitation patterns and frequency, and the intensification of tropical cyclones caused by climate change have led to a rise in health hazards associated with air and water. Climate change poses a threat to global public health, reversing improvements that have been made in this area. Projections for the years 2030-2050 predict that, starting from the 2030s, there could be an estimated 38,000 deaths due to heat exposure among the elderly, 48,000 deaths due to diarrhea, 60,000 deaths due to malaria, and 95,000 deaths among children due to malnutrition (World Health Organisation [WHO], 2014, p. 13). These predictions underscore the serious potential impacts of climate change on human health. Addressing the adverse health effects of climate change requires a comprehensive and collaborative approach. This includes basically measures to reduce greenhouse gas emissions, improve infrastructure to handle extreme weather events, develop early warning systems, and enhance healthcare and public health systems' capacity to respond to the changing health risks.

For Türkiye, three accelerating trends are likely to be experienced due to global warming: increased temperatures, water scarcity, and rising sea levels. These trends will contribute to more frequent and severe weather conditions, posing significant challenges to various sectors such as agriculture, water resources, infrastructure, and coastal areas. The impacts of climate change are expected to have wide-ranging consequences on ecosystems, communities, and economies, necessitating effective climate adaptation and mitigation strategies to address these challenges (Parry et al., 2023, p. 4). According to data obtained from World Meteorological Organization (WMO) in 2021, Türkiye experienced 71 reported disasters during that time frame. This data highlights the occurrence of various types of disasters in Türkiye over those years, which could include events such as earthquakes, floods, wildfires, and other natural and weather-related incidents (WMO, 2021, p. 87). Even short- to medium-term projections related to climate change can contain concerning scenarios and certain countries will indeed experience these challenges more intensely. Particularly in countries located in the Mediterranean basin like Türkiye, Syria, Iran, and Iraq, where there's already limited freshwater availability, warming temperatures and changing rainfall patterns could exacerbate water scarcity (NSMIP, 2020, p. 37). This could lead to further decreases in water levels and potentially contribute to new forms of conflicts and tensions in the region. Water scarcity is a critical issue, and changes in climate patterns can have profound impacts on water resources, agriculture, livelihoods, and social dynamics. Competition for limited water resources can indeed escalate existing challenges and potentially lead to conflicts, especially in areas where water is already a sensitive and contentious topic. Addressing these challenges requires a combination of adaptive strategies, efficient water management, international cooperation, and policies that promote sustainable resource use. It's an urgent

matter that highlights the interconnectedness of climate change, resource availability, and geopolitical stability.

Therefore, climate change impacts are not uniform and will vary across countries and regions, but it poses a threat to the security and existence of all nations. Some low-lying island nations are at risk of disappearing due to sea-level rise, while many others will face territorial loss, displacement of populations, and disruptions to major cities. Climate change also has the potential to intensify various security issues. The combination of environmental stressors, resource scarcity, and migration can lead to political instability, exacerbating conflicts within and between countries.

2. DEVELOPMENT OF INTERNATIONAL CLIMATE CHANGE POLICY AND TÜRKİYE'S POSITION

Climate change is indeed characterized by its global nature. Addressing this issue through unilateral actions or efforts by individual states is not sufficient to provide a comprehensive solution. This is where international cooperation and collective efforts come into play. It's evident that solving this problem requires a global response. The environmental movement of the 1960s brought significant attention to local and national environmental issues¹. However, as governments and communities began to grasp the interconnectedness of environmental problems and their global implications, the need for international collaboration became evident (Pruitt, 2018). Starting from the 1970s, the international community began to acknowledge and discuss the issue of climate change. This marked the beginning of a period where steps were taken to bring the problem to the forefront of international discussions and establish agreements to outline the framework for global action. This recognition eventually paved the way for the establishment of international agreements and organizations aimed at addressing global environmental concerns. The UN played a pivotal role in facilitating these efforts. The UN Scientific Conference on the Human Environment, held in Stockholm, Sweden from June 5 to June 16, 1972, marked a significant turning point in international environmental discussions. This conference is often referred to as the First Earth Summit and played a pivotal role in shaping global environmental policy (UN, 1972). During the conference, a declaration was adopted that outlined principles for safeguarding and improving the human environment. Additionally, an action plan containing recommendations for international environmental action was established. One notable aspect of this declaration was its inclusion of the issue of climate change, which was raised in a section discussing the identification and control of pollutants of international significance. This marked the first time that

¹ The counterculture of the 1960s rejected traditional values, advocating for individual freedom, peace, love, and a rejection of consumerism. This movement was characterized by its embrace of alternative lifestyles, experimentation with drugs, and a commitment to social justice and environmental activism (Pruitt, 2018).

climate change was formally recognized on an international stage. The declaration urged governments to consider the potential impacts of their activities on climate change and to evaluate the likelihood and magnitude of climatic effects.

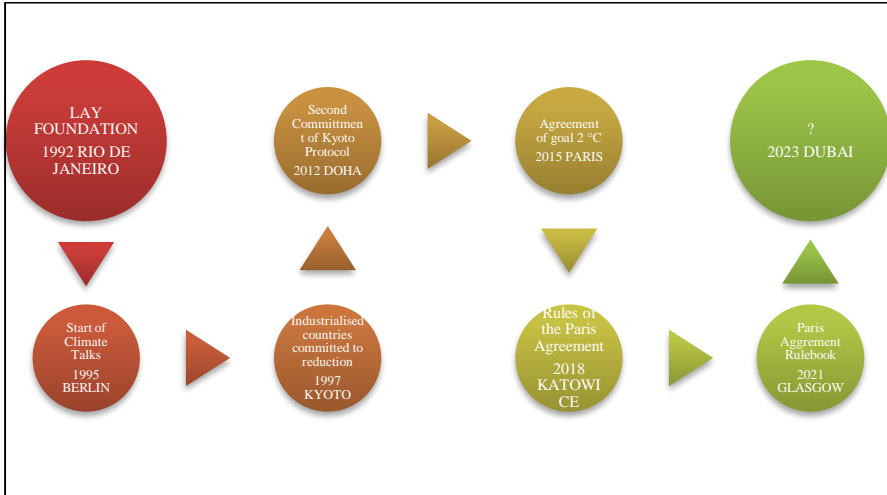
The Stockholm Conference laid the groundwork for future international efforts (Johnson, 2012, p. 39). In 1988, WMO and UNEP (United Nations Environment Programme) established the IPCC to assess the science, impacts, and policy options related to climate change. The IPCC has been subjected to criticisms of being both overly cautious and overly political in its assessments (IPCC, 2023c). The IPCC plays a critical role in providing scientific assessments and information to guide global climate policy. Its periodic assessment reports² are considered authoritative sources of information on climate change and its potential impacts. These reports are instrumental in shaping international agreements and policies aimed at mitigating and adapting to climate change.

2.1. The United Nations Framework Convention on Climate Change (UNFCCC)

The negotiation and adoption of international agreements, as the UN Framework Convention on Climate Change (UNFCCC) in 1992 and the subsequent Kyoto Protocol and Paris Agreement, have been significant milestones in bringing nations together to address climate change collectively as can be seen in Figure 2. The delays in reaching such agreements and the ongoing efforts to strengthen commitments highlight the difficulties in coordinating actions on a global scale (Jackson, 2007). However, these international agreements also demonstrate the recognition of the urgency and the need for collaborative action to mitigate and adapt to the impacts of climate change. On an international scale, the foundation of the climate change regime is laid out by the UNFCCC.

² The most recent development regarding the IPCC's finalization of "the Synthesis Report for the Sixth Assessment Report" during its 58th Session in Interlaken, Switzerland in March 2023. It underscores the organization's ongoing efforts to provide updated and comprehensive assessments of the current state of climate science and its implications. This information is crucial for policymakers and the global community to make informed decisions in addressing the challenges posed by climate change (IPCC, 2023a).

Figure 2. Key Milestones in the Evolution of International Climate Policy



As a framework convention, it provides a document outlining general principles, rules, and frameworks without delving into specific details of the problem area. The convention's main objective is to achieve a level of atmospheric Greenhouse Gas (GHG) concentrations that will prevent dangerous anthropogenic interference with the climate system. However, the convention does not clearly define what this level is or what actions parties need to take to maintain their emissions at this level. In other words, binding emission targets for parties are not included in the document. The convention's most important guiding principle is the "The Principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC)" which establishes the common responsibility of states for the protection of the global environment. But in addition, also lays down different standards of conduct for developed and developing nations. This principle becomes a bridge that encourages cooperation and consensus among parties, addressing one of the fundamental issues of climate injustice among countries in the process. Reflecting the principle CBDR-RC³, UNFCCC categorized countries into two groups: "Annex I" and "Annex II". The term Annex I generally refers to developed countries, while Annex II pertains to developing countries. According to the Convention, Annex I countries have a greater role in mitigation efforts compared to Annex II countries (UNFCCC, 1992). This division acknowledges historical responsibilities for greenhouse gas

³ United Nations Framework Convention on Climate Change, 1992, Article 3: PRINCIPLE 1 "The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof". Article 4: COMMITMENT 1 "All Parties, taking into account their common but differentiated responsibilities and their specific national and regional development priorities".

emissions and recognizes the varying capacities of nations in addressing climate change. Under these circumstances, the developed countries take a lead and shoulder greater obligations in the process, considering the historical emissions and capabilities they possess. This ensures that the process of addressing climate change is fair and that countries with differing capacities contribute according to their capabilities.

Countries outside Annex I and Annex II categories mentioned as "Non-Annex Countries". Their responsibilities are determined accordingly. Annex I countries consist of Organisation for Economic Co-operation and Development (OECD) countries, including Türkiye. These countries are given a responsibility The Convention obliges Annex-I countries to reduce GHG emissions, to protect and to develop sinks and to report the measures they take to prevent climate change and data about GHG emissions (Ministry of Foreign Affairs [MFA], 2022a). Annex II is also quite similar, assigning them an additional responsibility: providing finance, technology transfer and capacity building supports to developing countries (UNFCCC, 1992, Article 4). In summary, developed countries under the UNFCCC are obligated to both reduce GHG emissions and provide financial support to developing countries. However, specific details regarding these obligations are not present. The differentiation between Annex I and Annex II underscores the recognition of historical responsibilities and the capacity of countries to contribute to addressing climate change. It also reflects the need for developed countries to support less-developed nations in their efforts to adapt to and mitigate the impacts of climate change.

The Framework Convention can be considered a good initiative to initiate the process. One of the most significant initiatives in climate agreements is the Conferences of the Parties (COP), which functions as the legislative body of the agreement. States parties to the agreement come together every year. These meetings evaluate agreements, make changes, introduce new regulations in areas needing improvement, and take new decisions.

2.2. Kyoto Protocol

The Third Conference of the Parties in 1997 holds particular importance in the climate regime due to the Kyoto Protocol⁴. It emerges as a strong regulation, marking a crucial milestone but also a period of stagnation. Due to the flexible nature of the Framework Convention, it requires clearer specifications and defined reduction obligations. This requirement was addressed in 1997, resulting in the creation of the Kyoto Protocol as an annex to the Convention (UNFCCC, 2008).

⁴ The Kyoto Protocol to the United Nations Framework Convention on Climate Change was adopted in Kyoto, Japan, in December 1997 and entered into force on 16 February 2005.

The Kyoto Protocol clarifies matters compared to the Framework Convention. It establishes a timeline, sets reduction targets, and even defines these targets for individual countries. The Protocol assigns responsibilities to the Annex I countries. These countries were required to reduce their GHG emissions to 5% below their 1990 levels during the 2008-2012 period. Specific reduction targets for each country were defined within the annexes (Kyoto Protocol, 1998, Article 3). These precise reduction targets were not enthusiastically received by countries, leading to the incorporation of flexibility mechanisms. However, these mechanisms were heavily criticized. What should be done is absolute reduction within boundaries. The flexibility mechanisms circumvent this by allowing for emission offsets. Instead of reducing emissions within their own areas, countries could increase storage areas. Forests and sinks, for instance, serve as such storage areas⁵. Another approach is not reducing emissions within their own boundaries but collaborating with other countries on projects related to renewable energy. The emission reduction achieved through these projects could then be counted towards their own targets. In a way, the flexibility mechanisms dilute the essence of the issue.

Türkiye became a party to the Kyoto Protocol on 26 August 2009. At the same time, Türkiye did not take place in Annex II of the Protocol as Türkiye had not ratified the UNFCCC while the Annex II list of the Protocol was being established. In this sense, Türkiye has no obligation regarding quantified emission reduction neither in first nor second commitment periods of the Kyoto Protocol (MFA, 2022a).

While the Kyoto Protocol may appear as a stricter regulation compared to the UNFCCC, inspections and sanctions do not fully achieve their intended purpose. Looking at the sanctions of the Kyoto Protocol, if commitments are not fulfilled, there are provisions for a 30% further reduction in the subsequent period. However, the second commitment period does not come into effect. This reduction is imposed on states by the agreement, meaning that the agreement determines the reduction obligation. The United States' opposition to this structure delays the implementation of the agreement. COP18, in 2012 held in Doha, the second commitment period of the Kyoto Protocol is set as 2013-2020. During this commitment period, advanced countries listed in Annex I are once again obligated to reduce their GHG emissions by 18% compared to 1990 levels (Doha Amendment to the Kyoto Protocol, 2012, Article 3, paragraph 1 bis). However, due to an insufficient number of parties signing on, this commitment period does not come into internal effect.

⁵ The Protocol provided various tools for countries to reach their targets. One approach was to harness natural processes called "sinks" that remove greenhouse gases from the atmosphere. Planting trees that absorb carbon dioxide from the air could be an example of this. Another approach was the Clean Development Mechanism (CDM), an international program that encouraged developed countries to invest in technology and infrastructure in developing countries, where significant emission reduction opportunities often existed. Under the CDM, the investing country could claim effective emission reductions as credits towards fulfilling their obligations under the Protocol.

Therefore, in 2012, during the Doha Conference, the second commitment period of Kyoto is extended, and it is decided that a new agreement needs to be reached. This process becomes a turning point in the climate regime, leading to a clear and sharp shift in the functioning of the agreement during the COP21, ultimately resulting in the paradigm shift to the Paris Agreement.

2.3. Paris Agreement

The Paris Agreement is a significant international treaty addressing climate change that was adopted by 196 Parties during the COP21 in Paris, France, on December 12, 2015. The Paris Agreement, a landmark international accord in the fight against climate change, officially entered into force on November 4, 2016. This milestone was achieved after the conditions outlined in the agreement, which required at least 55 parties responsible for a minimum of 55% of global GHG emissions, were met. Its primary objective is to limit the rise in the global average temperature to well below 2°C above pre-industrial levels while striving to restrict the increase to 1.5°C above those levels. In recent times, global leaders have underscored the urgency of limiting global warming to 1.5°C by the close of this century. This emphasis has arisen due to warnings from IPCC that surpassing the 1.5°C threshold could result in significantly more severe climate change consequences, including heightened occurrences of severe droughts, heatwaves, and extreme rainfall events. To achieve the target of limiting global warming to 1.5°C, GHG emissions need to peak before 2025 at the latest, followed by a 43% reduction by 2030 (Paris Agreement, 2015, Article 2). The Paris Agreement holds immense importance in the realm of multilateral efforts to address climate change because, for the first time, it establishes a binding commitment that unites all nations in the fight against climate change and the endeavour to adapt to its impacts.

To effectively restrict global warming to the safe threshold of 1.5 °C, which the IPCC identifies, achieving carbon neutrality by the middle of the 21st century (as 2050) is crucial. This objective is also a fundamental component of the Paris Agreement, a commitment endorsed by 195 countries, including the European Union (EU)⁶. The Paris Agreement outlines the necessity for countries to collectively work towards the reduction of GHG emissions, with the aim of avoiding the most severe impacts of climate change. Carbon neutrality, achieved when a country's net GHG emissions are

⁶ EU demonstrated its leadership in climate action by becoming the first major economy to present its emissions reduction target as outlined in the Paris Agreement. The EU pledged to decrease its CO2 emissions by 40% by 2030, relative to 1990 levels. In June 2021, the European Parliament took a significant step by enacting the EU Climate Law, which transformed the political commitment of achieving climate neutrality by 2050, as part of the Green Deal, into a legally binding obligation. This law reinforces the EU's dedication to addressing climate change comprehensively and effectively. During the COP26 summit in Glasgow in November 2021, the EU is anticipated to showcase the EU Climate Law as a noteworthy accomplishment, underscoring its ambitious commitment to combating climate change and contributing to the global efforts to secure a more sustainable and climate-resilient future (European Parliament [EP], 2021).

reduced to zero, is a pivotal step in this global effort to mitigate climate change and ensure a sustainable future.

The most significant difference of the Paris Agreement from previous agreements is that the obligations are determined by the parties themselves, rather than being set by the agreement. Through commitments known as Nationally Determined Contributions (NDCs), parties pledge their reduction targets. Additionally, unlike the focus primarily on emission reduction before the Paris Agreement, we observe the introduction of both reduction and adaptation mechanisms. Another important aspect is the incorporation of concepts of loss and damage, as well as a substantial emphasis on climate justice within the Paris Agreement. It highlights the fact that parties with no responsibility for causing climate change, especially vulnerable countries and small island nations, suffer significant losses and damages due to its impacts. Their demand is for these losses and damages to be addressed under a notion of responsibility and compensation, seen not merely as financial support, but rather as a climate debt, a carbon debt they attribute to others. They call for the development of new mechanisms in this regard: climate finance.

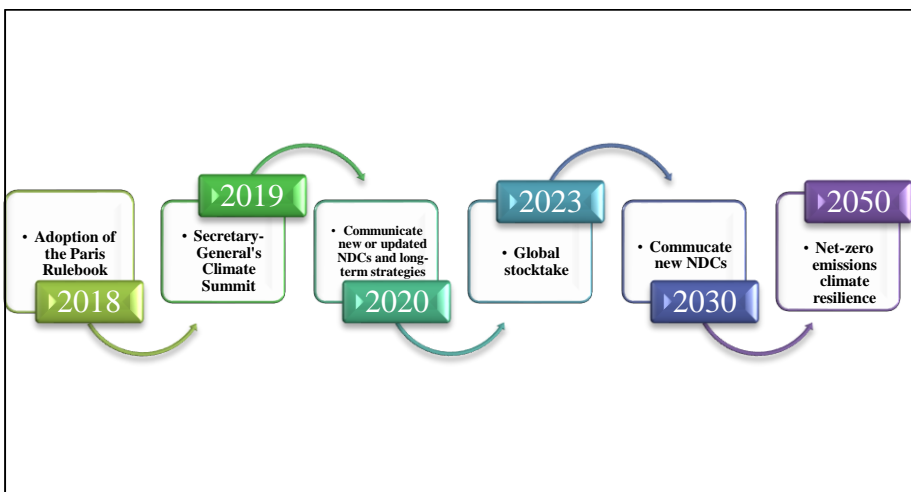
Following the adoption of the Paris Agreement in 2015, the parties involved established a three-year timeline to finalize the guidelines for its implementation. This process culminated in the 2018 summit in Katowice, Poland, where the Parties agreed upon the Paris Rulebook, also known as the Katowice Climate Package or Katowice Rulebook. The Katowice Rulebook marked several key achievements, including specifying the content that countries should include in their NDCs, demanding information about climate action financing in developing nations, and outlining parties' reporting and information requirements. Nonetheless, the Paris Rulebook was not fully complete due to the absence of an agreement on all its components, notably the rules stipulated in Article 6. It wasn't until COP26 in Glasgow that the outstanding issues were resolved, rendering the Paris Agreement fully operational. The most noteworthy changes pertained to the three operative elements of Article 6 and the establishment of common timeframes for NDCs. This progress at COP26 marked a crucial step in advancing the implementation of the Paris Agreement and strengthening global efforts to combat climate change.

Indeed, the Paris Agreement incorporates various flexibility mechanisms concerning emission reductions. The specifics of these mechanisms became clearer with “the Paris Rulebook”, which was established after COP26. The Paris Rulebook outlines the operational details and guidelines for the implementation of the Paris Agreement. It includes provisions regarding reporting, transparency, accountability, and various mechanisms that facilitate countries in achieving their emission reduction targets while considering their unique circumstances. These mechanisms are designed to enable countries to utilize a range of approaches to fulfil their commitments, including market-based mechanisms, international

cooperation, and capacity-building support. The Rulebook clarifies how these mechanisms should be implemented to ensure consistency, transparency, and accountability among the parties involved. In essence, the Paris Rulebook enhances the effectiveness of the Paris Agreement by providing a clear framework for implementing its provisions and utilizing these flexibility mechanisms to drive global climate action.

The Paris Agreement operates on a plan-implement-review cycle as can be seen in Figure 3, which aligns with its objective to regularly assess collective advancement. This cycle supports the Agreement's commitment to conducting a comprehensive evaluation of global progress every five years, known as the global stocktake. This stocktake serves as a vital component of the process and is often referred to as the Agreement's ambition mechanism. During the global stocktake, countries come together to collectively assess the overall progress made towards the Agreement's objectives. This process offers insights into the effectiveness of implemented measures, the level of ambition demonstrated, and the collective impact on global climate goals (World Resources Institute [WRI], 2022, p. 4). The information gathered during the global stocktake informs each participating country as they evaluate how to enhance their NDCs, considering their individual national circumstances. Successive rounds of NDCs are intended to represent a nation's most ambitious strategies, continually building upon the preceding ones, thereby demonstrating a progression towards stronger climate action. This iterative approach ensures that countries are consistently advancing their efforts to tackle climate change and collectively achieve the Agreement's goals.

Figure 3. The Paris Agreement's Plan-Implement Review Cycle



Source: WRI, 2022, p. 3.

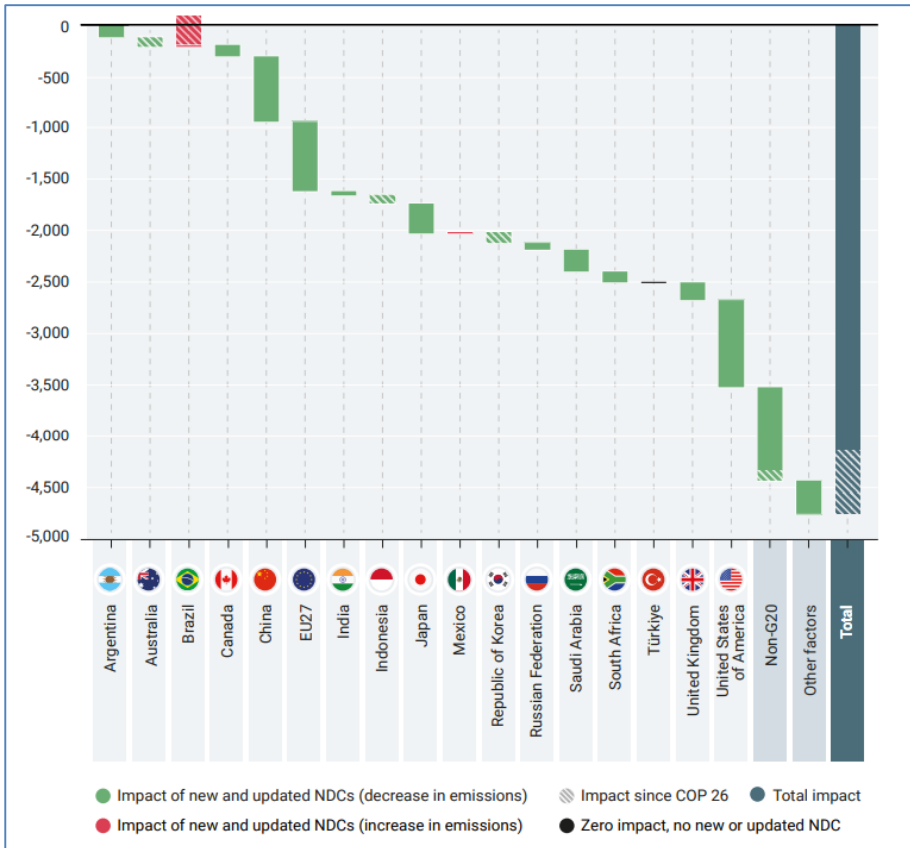
The Gas Emission Report, issued by UNEP, offers an estimation of the potential impact on global emissions projected for the year 2030. This estimation is based on the new and revised NDCs submitted by various countries. These estimates, considering full implementation of the NDCs, are compared against the initial NDCs put forward by the same countries. The data utilized in this report is derived from three modelling groups that incorporate updated NDCs with varying cut-off dates between November 2021 and September 2022. Additionally, two open-source tools were employed to gather this information. Notably, to account for the updated NDCs submitted by G20 member countries after the cut-off dates of the five data sources, such as Australia, Brazil, India, Indonesia, Republic of Korea, and the United Kingdom, NDC emission projections were re-evaluated. This recalculation was based on historical emissions data used in the relevant studies, allowing for the inclusion of the updated NDCs of these countries in the overall assessment. NDCs of several countries outline their specific emissions reduction targets in relation to projected GHG emissions for 2030. Here's a breakdown of the NDCs of different countries as can be seen in Figure 4: Australia 10%, Brazil 35%, Indonesia 10%, Saudi Arabia 25%, Republic of Korea 5%, Non-G20 members: A reduction target of 15%. For certain G20 members, the anticipated impact on global GHG emissions in 2030 is projected to be zero. This applies to members that have not submitted updated NDCs (such as Türkiye⁷), those that have submitted NDCs with similar targets as previous updates (like the United Kingdom), or those where the updated target is expected to result in higher emissions compared to projections based on existing policies (as seen with India and the Russian Federation) (UNEP, 2022, p. 14). Interestingly, both Brazil and Mexico have witnessed an increase in their emissions reduction targets when compared to their previous targets. This change is attributed to a shift in reference emissions used for calculation purposes.

In addition, according to the "Production Gap Report" prepared by prominent research institutions, including the UN, governments are planning to produce 120% more fossil fuels than the maximum amount that can be burned to limit global warming to 1.5 degrees by 2030 (Stockholm Environment Institute [SEI] et al., 2021, p. 15). This situation directly

⁷ Türkiye's initial NDC, which covered the period from 2012 to 2030, was presented with the intention of achieving reductions up to 21% by 2030 compared to 2012 levels. This initial submission was made on September 20, 2015, prior to Türkiye becoming a party to the Paris Agreement, and thus it is referred to as the "Intended Nationally Determined Contribution" (INDC). However, Türkiye updated its NDC in the context of the Paris Agreement, to which it became a signatory on April 22, 2016, and ratified on October 7, 2021. The announcement of Türkiye's updated NDC was made by the Minister of Environment, Urbanization, and Climate Change during the COP27 in Sharm El Sheikh. With this updated NDC, Türkiye committed to reducing its greenhouse gas emissions by up to 41% by 2030 compared to 2012 levels, and also set a long-term target of achieving net-zero emissions by the year 2053 (Çevre, Şehircilik ve İklim Değişikliği Bakanlığı [CSB], 2022a).

undermines efforts to achieve the goals of the Paris Agreement. The IPCC's 6th Assessment Report paints an even darker picture, indicating that within the next 10 years, global temperature increase will exceed 1.5 degrees, implying that the Paris Agreement is on the brink of failure (IPCC, 2023b, p. 92). After the publication of the emission report, COP27 took place from 6 to 20 November. The main focus of the summit held in Sharm El Sheikh was "loss" and "damage," which emerged as a pivotal and politically contentious topic among the negotiating groups. COP28 will convene from 30 November to 12 December 2023 in Dubai, United Arab Emirates (UAE).

Figure 4. The Assessment of Updated Unconditional NDCs on Global Emissions in 2030.



Source: UNEP, 2022, p. 14.

2.4. International Climate Change Policies of Türkiye

Türkiye's emergence in the international arena of climate change can be attributed to significant events such as the 1972 Conference on the Human

Environment, the 1992 Rio Summit, and the 2002 Johannesburg Summits. Additionally, the process of accession negotiations with the EU also played a role in aligning Türkiye's traditional environmental policy methods with EU standards. In the preparatory phase of the UNFCCC, "developed countries" that were assumed to bear historical responsibility for emissions reductions in terms of greenhouse gases were listed in Annex I of the Convention. These countries were expected to make efforts towards emission reductions. Furthermore, countries that were obliged to provide financing and technology support to developing nations were included in Annex II, which includes OECD member countries. Türkiye, being a founding member of the OECD, was included in both Annex I and Annex II.

However, during the COP7 of the UNFCCC in 2001, a decision was made to remove Türkiye's name from Annex II. As a result, Türkiye is currently listed only in Annex I. It's worth noting that although Türkiye was included in Annex I in 1992, it does not have a historical responsibility for GHG emissions. Türkiye ratified the UNFCCC in 2004, but it has not become a party to the Convention despite its ratification. Türkiye's situation in the UNFCCC has been prevented from being a party to the Kyoto Protocol for a long time. Türkiye, as a developing country, was not included in the list of developed countries with binding emission reduction targets during the initial commitment periods. On August 26, 2009, Türkiye ratified the Kyoto Protocol, signalling its participation in the global efforts to address climate change (MFA, 2022a). However, it did not have binding emission reduction obligations during the first and second commitment periods of the Kyoto Protocol.

At COP16 held in Cancun in 2010, the decision 1/CP.6 was adopted, acknowledging that Türkiye, unlike other Annex I countries, had distinct conditions, a fact accepted by all parties. It was confirmed that Türkiye had no obligations for providing financing and technology. Following the 17th Conference of the Parties held in Durban, South Africa in 2011, as per decision 2/CP.17, discussions were held to determine the procedures for providing support to our country regarding its specific circumstances, in accordance with paragraph 170 of the decision. These discussions were aimed at ensuring the implementation of the Convention in terms of emission reduction, climate adaptation, technology development and transfer, capacity building, and financing, as stated in the decision. In the 18th COP, Türkiye's unique position among Annex I members was reiterated. The 19th COP involved negotiations on matters such as continued financial support, technology transfer, and capacity building for Türkiye until 2020. In the final paragraph, it is emphasized that developed countries are encouraged to provide financial, technological, technical, and capacity-building support to parties that have been recognized with special conditions. This support is aimed at enabling these parties to implement their national strategies, develop strategies for reducing greenhouse gas emissions, adapting to climate change,

and fostering low-carbon development. The encouragement extends to utilizing mechanisms such as the Global Environment Facility (GEF) along with other multilateral institutions, international organizations, and bilateral funds to facilitate the provision of support through avenues such as finance, technology, and capacity development. (Çevre, Şehircilik ve İklim Değişikliği Bakanlığı [CSB], 2022b).

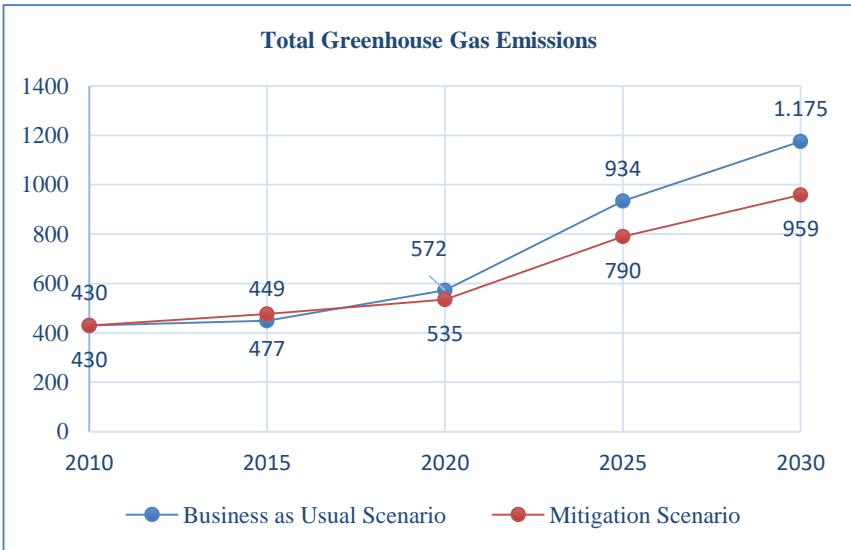
Türkiye signed the Paris Agreement on April 22, 2016, during the signing ceremony in New York. However, Türkiye did not become a party to the Paris Agreement until October 7, 2021. Because during this period, Türkiye had two fundamental red lines in its climate change negotiations and within the scope of the Paris Agreement. The first one is to ensure access to financial and technological support under the Paris Agreement. The second one is to be excluded from the provision in the Paris Agreement that mandates absolute emission reductions for developed countries in the overall economy (Yeşil Ekonomi, 2018). After Türkiye becoming a party to the Paris Agreement, it was officially approved through a Presidential Decree, and the internal legal approval process was completed. The ratification document, along with the national statement, was submitted to the UN Secretariat on October 11, 2021. There is a distinction between "signing" and "becoming a party" to the Paris Agreement: For the Paris Agreement to enter into force in the signatory countries, it must also be ratified by their respective parliaments. Even if countries sign the agreement, they are not considered parties until they have gone through their internal approval processes. A total of 197 countries and autonomous regions signed the agreement. Among them, 191 completed the process to become parties. However, countries like Türkiye, Eritrea, Iran, Iraq, Libya, and Yemen did not become parties to the agreement. Türkiye was the only OECD and G20 member not to have ratified the Paris Agreement.

In its first NDC submitted before signing the Paris Agreement, Türkiye indicated that it aimed to achieve a reduction in GHG emissions by approximately 18% to 21% by the year 2030. To attain this 2030 target, Türkiye planned to utilize international market mechanisms within the framework of relevant rules and standards, considering cost-effectiveness. With an 18% reduction in GHG emissions by 2030 compared to a reference scenario, Türkiye communicated its commitment to contribute to the global goal of limiting warming to 2 °C taking into account its national conditions and capabilities. The INDC outlined specific policies and plans under the sectors of energy, industry, transportation, buildings and urban transformation, agriculture, waste, and sinks. It was detailed that implementing policies and measures in these sectors would result in a more substantial reduction of 21%. So, according to the current policies, the target was to achieve a reduction of at least 21% in emissions by 2030 compared to the Business as Usual (BAU) scenario.

Using the approach of emissions reduction from a baseline of projected increases, this calculation indicated that Türkiye's greenhouse gas emissions

would be reduced by 2030 from the level they would reach if no action were taken. In other words, the emissions would first increase by a certain amount and then be reduced by 21% due to climate actions and measures implemented by 2030. Countries like Argentina and Brazil, facing similar situations to Türkiye, aim to reduce their emissions below 2005 levels by 2030. Mexico, on the other hand, plans to peak its emissions around 2026 and subsequently decrease them. In Türkiye's official plans, there isn't a specific target for reducing GHG emissions beyond 2030. When examining the NDCs of countries, it can be observed that 61 countries have committed to absolute emission reductions, 10 countries aim to control emission intensity, and 83 countries have set targets to reduce emissions from their reference scenarios. Türkiye falls within the group that pledges to reduce emissions from their reference scenario (UN, 2023). It's worth noting that these commitments vary based on a country's circumstances, capabilities, and priorities, and they reflect the diverse approaches taken by nations to address climate change in alignment with their respective contexts. According to the approach of emission reduction from a baseline of projected increases, Türkiye's GHG emissions were projected to reach 1,175 MtCO₂e by the year 2030 if no actions were taken (MFA, 2022b). However, with climate actions and measures, it was anticipated that by 2030, these emissions could be reduced to 959 MtCO₂e. This calculation indicates the potential reduction in emissions that could be achieved through climate mitigation efforts (see Figure 5).

Figure 5. Türkiye's Nationally Determined Contribution



On the other hand, the international public opinion often perceives this incremental reduction commitment as weak. According to an analysis published by the Climate Action Tracker in 2019, Türkiye's existing policies

indicate that the stated commitment could be easily achieved, making the national declaration "Critically Insufficient". This is because Türkiye appears willing to do much less than it is capable of. The report suggests that by just increasing climate action in sectors like electricity supply, road passenger transportation, and residential buildings, Türkiye could reverse its current emission increase trend and potentially reduce total greenhouse gas emissions by up to 14% by 2030 compared to 2017 levels (Climate Action Tracker, 2019, p. 10). In the report, it was emphasized that even increasing climate action in only the electricity supply, road and rail passenger transportation, and residential building sectors in Türkiye could result in a 14% reduction in economy-wide emissions by 2030 compared to 2017 levels. These sectors are responsible for approximately 50% of Türkiye's national GHG emissions (excluding land use and forestry). Türkiye was already on a path where it can easily achieve the emission reduction targets stated in the Paris Agreement commitment. Ambitious efforts directed towards decarbonizing these three sectors in Türkiye could significantly reduce GHG emissions and provide additional benefits such as creating job opportunities in the construction and manufacturing sector, generating employment in renewable energy, reducing pollution caused by traditional transportation and electricity generation methods to support sustainable development goals, and promoting modern housing options. However, Türkiye has not been successful in implementing effective policies in these areas since signing the Paris Agreement.

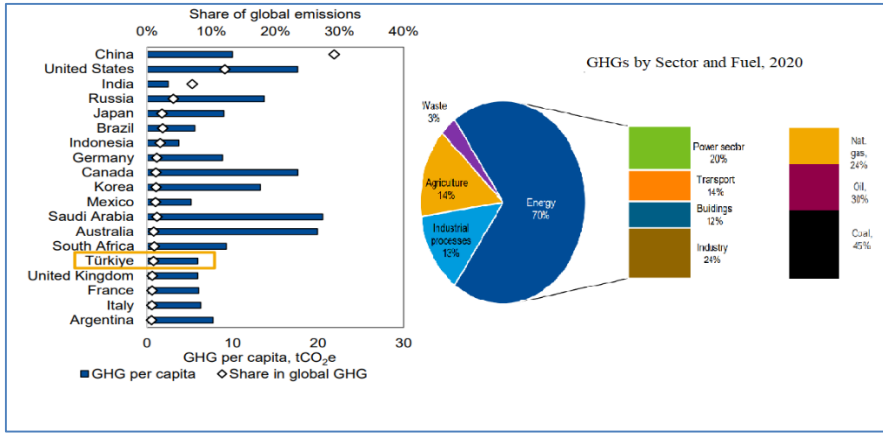
In the second phase of NDCs, Türkiye through "Updated First Nationally Determined Contribution"⁸ confirms its commitment to reduce greenhouse gas emissions by 41% by 2030 compared to the BAU scenario, using the year 2012 as the base year (reference year). This reduction corresponds to 695 million metric tons of CO₂ equivalent in 2030. The updated NDC covers the entire economy and includes comprehensive mitigation and adaptation actions, as well as evaluations of implementation tools. Türkiye intends to peak its emissions by no later than 2038. The new reduction target represents a considerably more ambitious commitment based on science and equity. It is also seen as a step toward achieving the net-zero target by 2053. This updated NDC aligns with the principle of "common but differentiated responsibilities and respective capabilities" present in both the Paris Agreement and the UNFCCC. It also demonstrates Türkiye's intention to implement these commitments in accordance with its specific circumstances as acknowledged by the decision 1/CP.16, which recognizes Türkiye's distinct status in comparison to other Parties listed in Annex I of the Convention, both

⁸ Türkiye, as a party to the Paris Agreement, is obligated to submit its NDC to the UNFCCC Secretariat. The country's Updated First NDC goals were announced during the Ministerial Session of the 27th Conference of the Parties (COP27) to the UNFCCC on November 15, 2022. Additionally, it was noted that the NDC was registered in the UNFCCC NDC Registry in April, 2023 (Ankara Sanayi Odası [ASO], 2023).

under the Paris Agreement and the UNFCCC framework (Republic of Türkiye, 2023). It's encouraging to see that the Updated Nationally Determined Contribution document includes various sectors such as "energy," "industry," "transportation," "building," "agriculture," "forestry," "water," "disaster risk management," "urban planning," "rural development," and "public health" in terms of adaptation efforts, key policy documents, and climate resilience goals. This indicates a comprehensive approach towards addressing climate change impacts and integrating climate adaptation measures across various sectors. It's crucial for nations to have a multi-sectoral strategy to effectively tackle the diverse challenges posed by climate change.

After a while later, a study has been published by The International Monetary Fund (IMF) analysing Türkiye's current status regarding its net-zero targets and the potential pathways to achieve these goals. The report highlights several key findings, indicating that Türkiye's goal of limiting greenhouse gas emissions to approximately 693 million tons by 2030, resulting in a 41% reduction compared to current levels, falls short of its stated target. According to the data presented in the report, Türkiye's commitment is not fully aligned with achieving net-zero emissions in the long term. For instance, in terms of per capita emissions, Türkiye's emissions are approximately at the global average, but the country remains a significant global emitter in absolute terms. Staff estimates indicate that Türkiye's GHG emissions were around 5.9 tonnes of carbon dioxide equivalent per capita in 2020, slightly below the global average of 6.1 tonnes per capita. However, this is significantly lower than the OECD average of 10.3 tonnes. Despite this, Türkiye ranked as the eighteenth largest emitter globally in absolute terms in 2020, with GHG emissions totalling 495 million tonnes, constituting 1% of the global total (Parry et al., 2023, p. 7). Considering these figures, efforts to mitigate emissions in Türkiye are of substantial importance at the global level. Moreover, these actions could serve as a catalyst for similar mitigation measures among other emerging market economies (see Figure 6). In addition, Türkiye's greenhouse gas emissions are composed of various sectors, with a significant portion being attributed to energy-related emissions, accounting for 73% of total emissions. The breakdown of emissions by sector is as follows: electricity generation contributes to 21% of emissions; fossil fuel consumption contributes to 24% of emissions, transportation accounts for 15% of emissions, buildings contribute to 13% of emissions, industrial processes account for 11% of emissions, agriculture contributes to 13% of emissions, waste management is responsible for 3% of emissions. This all distributions highlight the major sectors that contribute to Türkiye's overall greenhouse gas emissions profile (see Figure 6).

Figure 6. Per Capita Emissions of Global Shares and GHGs by Sector and Fuel in 2020



Source: Parry et al., 2023: 7.

3. FUTURE-LOOKING APPROACHES IN TÜRKİYE'S CLIMATE CHANGE POLICIES

IPCC highlighted in its 4th report that the Mediterranean Basin, including Türkiye, is one of the most vulnerable regions to global climate change. The report indicates that by the end of the 21st century, temperature increases will lead to decreased rainfall, drought, and declining water resources (Pachauri and Reisinger, 2007, p. 49). However, despite Türkiye increasingly experiencing the impacts of the climate crisis, such as rising average temperatures, increased natural disaster occurrences, and drought data, still it has become one of the countries with the fastest-growing GHG emissions due to its national development goals. Indeed, despite the existence of agreements, we can observe that Türkiye's emissions have been continuing to rise. This is because the issue of climate change is highly complex, but when we delve into its essence, we know that GHG emissions are the main cause of climate change. This lack of emphasis on transitioning away from coal, which is a crucial aspect in combating climate change, could potentially hinder the progress towards achieving emission reduction goals. It's important for countries to develop clear strategies and plans for transitioning to cleaner energy sources as part of their broader climate change policies. Notably, even in the NDCs of Türkiye, the word "coal" is not mentioned once. Another noteworthy point in the NDC is the explicit mention of forests as crucial sink areas for GHG emissions. While losses are incurred due to forest fires every year, specific details are not provided regarding the widespread implementation of functional fire management plans across the country,

utilizing information technologies for forest protection, and enhancing measures for the prevention of forest fires.

With the Paris Agreement, a new chapter has been opened in Türkiye's fight against the climate crisis. While responsibilities are shared, the authority to take action lies with decision-makers. In order to avoid greater disasters each year and to prevent larger ecological, economic, and societal tragedies, decision-makers need to address the crisis as a true crisis from today onwards. After the approval of the Paris Agreement by the Parliament in 2021, the updated NDC suggest an increase in emissions rather than a reduction, with an expected increase of over 30% in greenhouse gas emissions by 2030. Given these circumstances, achieving the carbon-neutral goal set for 2053 seems rather unlikely. In this case, Türkiye needs a "climate law"⁹ to achieve its carbon neutrality goal. The aim is the recognition of the climate crisis as binding and the establishment of an institutional framework for combating it. This institutional framework includes market-based mechanisms like emissions trading systems, guidance from science, civil society engagement, clear planning tools like carbon budgets, financial and budget policies, and inter-agency coordination as key components. Moreover, fundamental principles like climate justice, human rights, transparency, accountability, social equity, nature conservation, and energy democracy need to be acknowledged, at least within the context of this issue. An absolute necessity for ensuring climate justice is the requirement for a climate law.

Indeed, the swift implementation of both mitigation and adaptation policies, which are the two fundamental approaches in combating climate change, is also crucial. Therefore, we can state with a straightforward formulation that the fundamental approach to combating climate change is to reduce GHG emissions. This is the first and most essential step for mitigation policies: reduction GHG emissions, primarily associated with fossil fuel consumption, is crucial. For the purpose of ensuring energy security, Türkiye aims to increase the share of both renewable energy sources and domestic coal resources in electricity generation. Renewable energy auctions in Türkiye offer very low prices for renewable energy sources, raising questions about how economically attractive it is to give more weight to fossil energy sources. While Türkiye has been among the countries planning the newest coal power

⁹ European Union countries have reached an agreement on a "European Climate Law" that will legally bind the Union to be climate neutral by 2050, and a target to reduce greenhouse gas emissions by 55% by 2030. The European Climate Law writes into law the goal set out in the "European Green Deal" for Europe's economy and society to become climate-neutral by 2050. The European Climate Law was published in the Official Journal on 9 July 2021 and entered into force on 29 July 2021 (European Union, 2021).

plants, there has been a decline in new coal power plant projects in recent years. In line with the Paris Agreement and for a compliant electricity sector, Türkiye needs to phase out coal gradually by 2030, significantly increase the share of renewable energy sources in planning, and boost the proportion of variable renewable energy sources. By the middle of the century, Türkiye's electricity generation needs to be fully decarbonized. This is also crucial for the decarbonization of end-use sectors through electrification.

Parallel to the decarbonization of electricity generation, Türkiye's passenger transportation sector also requires a strong electrification process for its fleet to align with the Paris Agreement. Other impact factors besides electrification include focusing on increasing the share of public transportation. In scenarios aligned with the Paris Agreement, these actions are projected to reduce emissions in this sector by approximately one-third by 2030 and to near-zero levels by 2050. Türkiye is one of the largest automotive manufacturers focused on exports (Climate Action Tracker, 2019, pp. 4-5). Simultaneously, Türkiye is aiming to produce domestic electric vehicles, which is a significant step toward achieving such a transformation and enhancing global competitiveness. For a housing sector aligned with the Paris Agreement, it is essential to strengthen standards for new zero-energy consumption buildings and undertake extensive renovations for existing residential structures. Electrification in heating and cooking and improvements to enhance energy efficiency are necessary; similar requirements apply to lighting and other devices. In scenarios aligned with the Paris Agreement, these actions are projected to reduce emissions in this sector by 40% to 50% from today until 2030 and to zero by 2050. This rate includes electricity-related emissions assuming the decarbonization of the electricity sector.

Secondly, adaptation policies: they need to be developed and implemented with a focus on fair transition principles, ensuring that no one is left behind. First and foremost, in light of the drought risk faced by Türkiye due to its geography, all water resources need to be protected. High water consumption in the energy and mining sectors should be prevented, and any interference with wetlands and aquatic ecosystems must cease. Agriculture, responsible for 14% of Türkiye's greenhouse gas emissions, requires attention. Drip irrigation systems should be promoted, and early warning systems should be established to prepare farmers for extreme weather events. Agricultural methods that increase organic matter content in soil and subsequently enhance carbon sequestration should be incentivized. Crop patterns in agriculture should be chosen based on regional precipitation patterns, and the use of water-intensive crops should be restricted in drought-prone areas.

Especially in recent years, Türkiye, including the Black Sea region, has faced climate-induced flood disasters. In urban areas, roads and road infrastructure must be designed with permeable surfaces to counter urban

floods. Cities should fulfil their water needs through methods like rainwater harvesting to prevent the need for water transport from different regions or basins.

Conclusion

Climate change has become an issue requiring urgent global attention, necessitating actions from all countries. Some regions classified as vulnerable experience the impacts of the climate crisis more profoundly and must confront its consequences more severely. While those responsible for the climate crisis and those adversely affected by its impacts might not be the same, the measures taken against the climate crisis must be global in scope. In line with this, the United Nations has taken the lead in addressing climate change and concrete steps have been initiated. The process, initiated by the United Nations Framework Convention on Climate Change, led to the establishment of the three crucial pillars with the Kyoto Protocol and the Paris Agreement. Regularly held Conference of the Parties meetings serve as a mechanism to monitor the success of the process. These international agreements and ongoing meetings are essential in coordinating global efforts to address the climate crisis and eliminate its impacts.

The study was handled within the scope of the initial research questions. Türkiye stands as one of the countries profoundly affected by climate change, primarily due to its geographical location within the Mediterranean basin and direct exposure to the climate change risks in this region. The study highlights how Türkiye's climate change policies have evolved through historical processes, its extent of participation in international efforts, and its recent approach to the Paris Agreement. However, Türkiye's continued reliance on fossil fuel-based policies and a lack of significant progress towards renewable energy sources indicate a departure from sustainability goals. Despite declaring the carbon neutrality goal for 2023, it's evident that more efforts are required to achieve this objective.

Hakem Değerlendirmesi: Dış Bağımsız

Yazar Katkısı: Ezgi Kovancı :%100

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