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# GERMANY'S CLIMATE POLICIES: PRACTICES AND PERSPECTIVES OF POLITICAL ACTORS

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#### Abstract

This study aims to analyze Germany's climate change policies, and to reveal the perception of political actors towards the impacts of climate change. In this context, the policy documents on Germany's climate change strategy are examined in order to understand the political perspective towards climate change and its impacts. Moreover, it is argued that the contradictions regarding the implementation of climate policies depends on the changing priorities in energy practices. To reveal climate focus of Germany, representatives of main political actors, who have different interests in terms of climate action, were interviewed. In

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this regard, as the climate crisis poses a crucial threat for several referent objects such as state, global system, individual or ecosystems, this study discusses whether the differentiated perspectives of political actors affect the security orientation of climate policies and actions of Germany.

**Keywords:** Climate Change, Germany, Security, Political Actor.

## ALMANYA'NIN İKLİM POLİTİKALARI: SİYASİ AKTÖRLERİN UYGULAMALARI VE PERSPEKTİFLERİ

Öz

Bu çalışma, Almanya'nın iklim değişikliği politikalarını analiz etmeyi ve siyasi aktörlerin iklim değişikliğinin etkilerine yönelik algılarını ortaya koymayı amaçlamaktadır. Bu bağlamda, iklim değişikliği ve etkilerine yönelik siyasi bakış açısını anlamak için Almanya'nın iklim değişikliği stratejisine ilişkin politika belgeleri incelenmektedir. Ayrıca, iklim politikalarının uygulanmasına ilişkin çelişkilerin, enerji uygulamalarındaki değişen önceliklere bağlı olduğu savunulmaktadır. Almanya'nın iklim odağını ortaya çıkarmak için, iklim eylemi açısından farklı çıkarlara sahip ana siyasi aktörlerin temsilcileriyle görüşülmüştür. Bu bağlamda, iklim krizi devlet, küresel sistem, birey veya ekosistemler gibi çeşitli referans nesneleri için önemli bir tehdit oluşturduğundan, bu çalışma siyasi aktörlerin farklılaşan perspektiflerinin Almanya'nın iklim politikalarının ve eylemlerinin güvenlik yönelimini etkileyip etkilemediğini tartışmaktadır.

Anahtar Kelimeler: İklim Değişikliği, Almanya, Güvenlik, Siyasi Aktör.

### Introduction

Although natural events such as volcanic eruptions trigger climatic changes, the climate crisis of the 21st century is directly linked to the anthropogenic activities, particularly to the increasing greenhouse gas emissions since the industrialization (IPCC 2021). The unexpected changes on natural cycles due to increasing temperatures create a complex process affecting humidity or precipitations, sea levels, ice caps, and also social economic and political systems. Moreover, climate change, which has transformed into a global crisis,

have become an important topic in the security literature. Especially environmental security approach analyzes multiple dimensions of threats caused by climate crisis with different referent objects. While Detraz and Betsill (2009) state that the environmental security discourse diversifies in terms of threats and vulnerabilities due to these threats, by emphasizing the question of "security from what and for whom", Diez et al. (2016) classify these threats against the referent objects as territorial, individual and planetary. McDonald (2018) also considers ecological systems (include all species as well as humans) as a referent object by focusing on the nexus of climate change and security.

In this context, it is possible to synthesize different environmental security approaches in the light of their diverse referent objects. These referent objects also crystalize the nexus of environmental security with traditional, common, human and ecological security. In traditional approach, the state is both the referent object to be primarily secured and the actor providing security (Smith 2001). The common security also accepts the state as a referent object to be secured; but it also underlines the role of global governance to develop the international cooperation through the states (Barnett 2013). Moreover, the human security, a people-centered approach, which regards individuals as the basis of a security object (Oels 2012). However, the ecological security, a relatively new approach, refers to the integrity of ecosystems and to the protection of all species on the basis of balance and equivalence against the threats caused by environmental degradation (Floyd and Matthew 2013, 9).

In this study, by accepting the climate crisis as the most urgent environmental security problem, Germany's climate policies are analyzed. Germany as the 7th global carbon emitter country is responsible for the historical and current global emissions, however it also plays a leading role in climate diplomacy, is among the most important environmental advocates (Global Carbon Atlas 2019) and considered as "an ambivalent forerunner" in the context of climate policies (Diez et al. 2016). This study is focusing on different German political actors' perceptions towards climate change. We aim to examine in this study whether traditional, common, human or ecological security concepts have been reflected into the climate policies and actions. Although the German government's composition was changed in 2021 elections, this study is based on the perspectives of previous government and opposition. A qualitative research methodology is utilized to assess the political documents and in order to understand political actors' climate priorities and their approaches towards climate change and security nexus the structured interviews with the representatives of the Social Democratic Party of Germany (SPD), the Christian Democratic Union (CDU), the Environment and Energy Ministry, and the Federal Parliament were realized. The data obtained by the interviews conducted in 2019 helped to evaluate whether the traditional, common/international, human or ecological security approach is prevailed in the climate decision-making process. The main objective of focusing on the former government's policies is to ensure a comparative perspective for the future studies that would reveal the potential change of German climate policies. Therefore,

firstly the impacts of the climate crisis in Germany, the political responses are examined. Then, the German political actors' attitudes towards climate change-security nexus are analyzed.

### 1. Impacts of the Climate Crisis in Germany

Germany, the largest economy in Europe and fourth-largest economy in the world, considers the climate crisis as a major and significant problem affecting human life and economic activities (The Climate Reality Project 2018). Some of the impacts of the climate crisis directly observed in Germany are rising sea levels, more frequent heat waves in cities and densely populated areas, physical effects due to the damage on buildings and infrastructures because of heavy rain and floods (Federal Ministry for the Environment Nature Conservation Building and Nuclear Safety 2016a). Additionally, climate-related impacts, such as drought in some areas negatively affect biological diversity, forestry, agriculture and the energy sector. It is estimated in many projections that the socio-economic impacts of the climate crisis may result in dangerous conditions; for instance, the narrowing of large rivers has a serious impact on many sectors in Germany, from agriculture to energy production (Federal Ministry for the Environment Nature Conservation Building and Nuclear Safety 2016a).

Due to the changing precipitation patterns in Germany because of the climate crisis, a temporary and regional changes of water amount and availability are also observed. The deficiency of precipitation affects the soil quality and the fertility of agricultural soil by causing fluctuations at groundwater and underground water levels

(The Climate Reality Project 2018). The water shortages could result in decreases in agricultural production and crop yield. On the other hand, torrential rain as an extreme weather event can trigger floods creating massive demolition and affect quality of drinking water, because the flood water pollutes the rivers and lakes. The torrential rains are especially observed in the western part of the country. Climate change has increased the probability of extreme precipitation by a factor of 1.2 to 9 (for a 1-day event), according to the research as part of the World Weather Attribution Project (Dewan 2021; World Weather Attribution 2021). In 2021, for instance, after the heavy rains affecting river basins in Netherlands, Belgium and Germany, more than 200 people died, many buildings were destroyed, infrastructures damaged, power outages occurred due to the flood (Fitzgerald et al. 2021).

Along with the increase in temperatures, the changes in precipitation have remarkable consequences. According to the research conducted by the Climate Service Center Germany (GERICS) (Kehse 2017), the precipitation in Germany has decreased by 11% since 1881 (Deutscher Wetterdienst DW 2017, 36). Especially, dry summers and below-average precipitation are naturally a serious concern in terms of increasing forest fires. Another significant impact of overtemperature is seen on public health. Many diseases, such as heart attack, heat stroke and organ failure show an increasing tendency due to the heath waves, and death rates also increase as a result of these problems. Moreover, new habitats available for disease carriers (vectors) such as mosquitoes, ticks or

insects expand the regional scope of the transmissible diseases. An increase in asthma and allergies is also expected due to the climate crisis.

Another impact of the climate crisis in Germany is observed in energy supply. Moreover, 25% of Germany's energy consumption is met by black and brown coal (Federal Ministry for the Environment Nature Conservation Building and Nuclear Safety 2016b, 42). Although black coal (anthracite) does not play a very important role (in mining sector), Germany is still the number one in the world regarding brown coal (lignite) mining. In 2012, 16,8% of all the brown coal extracted in the world was in Germany, and the brown coal is still one of the most significant energy sources in the country (Arnold et al. 2017, 42). This sector also continues to be an important part of energy and economy policies with 22.000 employees. However, the brown coal consumption, due to its high carbon dioxide (CO2) emission, could be seen as a major obstacle for the German federal government to achieve its climate mitigation goals.

Considering Germany's dependency on Russian natural gas regarding the energy supply (Halser and Paraschiv 2022), renewable energy sources are generally considered to be positive, and Germany takes into account the improvement of renewable energy technology. However, among the energy sources the nuclear energy is probably the most disputable because of the nuclear waste disposal and the reactor safety issues. Although the statements of nuclear industry argues that nuclear energy is climate friendly, safe and provides guarantee for occupational safety and low electric prices; the media

reports show the negative image of the nuclear industry on the public opinion, and the assessments are highly negative towards nuclear energy, its role on the energy prices for German households (Federal Ministry for the Environment Nature Conservation Building and Nuclear Safety 2016b).

### 2. Climate Policies of Germany

Germany is one of the countries that have an active role in the formation of international and European Union policies in the climate change negotiation processes (Federal Ministry of the Environment, Nature, Conservation and Nuclear Safety 2020; Schäfer 2016). As long as the public opinion, political actors, and policymakers began to be interested in the environmental issues, new environmental regulations have been brought into the political agenda since the 1980s (Arnold et al. 2017). At the beginning of the 1990s, Germany's climate policies began to be shaped (Reimer and Reimer 2018). On 7 November 1990, the Federal Republic of Germany took a Cabinet Decision determining the first climate target. According to this decision, it was planned to reduce German greenhouse emissions to a minimum of 25% below the 1987 levels until 2005. Therefore, the present standard of the Federal Republic of Germany is the basic value of the equivalent of 1,250,247 tons of carbon dioxide, the amount recorded at the beginning of 1990s. Today, this number is the key criterion of Germany's climate protection efforts.

With the Kyoto Protocol, Germany had accepted to achieve its first emission-cut goal through a series of legal measures based on a voluntary commitment from the German industry. To this end,

industrial associations concluded an agreement with the Economic Institute of Germany (RWI) regarding the monitoring of greenhouse gases. This procedure changed in 1999 by the EU, when the Federal Government published the first greenhouse report as part of the monitoring of CO2 and other greenhouse gases. With the Paris Agreement, Germany accepted to support other states by providing information on how their efforts (financial enterprises) were monitored and which research projects were carried out by the Federal Government (Reimer and Reimer 2018). The "Climate and International Affairs" department of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) became responsible for this goal. In this regard, Germany adopted three important packages and programs to reduce greenhouse gas emissions: the Climate Action Program 2020, the Climate Action Package 2030, and the Climate Action Plan 2050.

The Background Paper, an important policy output regarding the studies carried out by Germany on climate policy, and covering the Climate Action Program 2020, was approved by the German cabinet on 2 December 2014. This program includes the measures that should be applied by Germany until 2020 in order to achieve the target of reducing greenhouse gas emissions by at least 40% compared to those in 1990 (Federal ministry of the Environment Nature Conservative and Nuclear Safety 2014). This Action Program covers all emissions generated by all sectors on a source basis. It also includes the Energy Efficiency National Action Plan (NAPE). The program is comprehensive, ranging from emission reduction to research

development and consultancy at all levels in the climate-friendly buildings, energy, transport, industry, commerce, agriculture, waste management sectors.

In November 2016, the German government accepted the Climate Action Plan 2050. The plan includes medium-term and longterm greenhouse gas reduction targets under the Paris Agreement. The medium-term goal of Germany is to decrease the greenhouse emissions by at least 55% by 2050, compared to 1990 levels. Strategies adopted to achieve this goal are collecting the cost of pollution from companies rather than consumers, lowering train ticket prices, incentives for electric vehicles, choosing environmentally friendly methods for electricity generation, and heating of buildings (Federal Ministry for the Environment Nature Conservation Building and Nuclear Safety 2016c). By this plan, Germany aims at the goal specified in the Paris Agreement to keep global warming significantly below 2°C and even not exceeding 1.5°C. The plan presents a threelevel strategy with individual action areas for the transition to a low carbon economy, emission targets for all sectors, concrete steps, impact and cost analysis are determined (Federal Environmental Protection Building and Ministry of Nuclear Safety 2016b).

On 9 October 2019, the German government accepted a draft of a comprehensive climate plan consisting of Climate Action Law and Climate Action Program 2030 (Wehrmann 2019; Federal Ministry of Finance 2019; The Federal Government n.d.). The Climate Action Program has a strategy paper summarizing the economy, clean energy generation and key policy measures to support the transition to low

emission technology to reduce the emission in all specified sectors. All sectoral emission reduction targets specified in the paper are regulated by referring to Germany's Climate Action Plan 2050. Emission reduction goals are determined by covering transportation, energy, agriculture and forestry, industry, carbon storage and finance sectors (Wehrmann 2019). One of the significant steps taken to fulfill the goals is the national CO2 pricing mechanism and reforming the national emissions trading system. In this respect, a national carbon pricing system has been introduced in the transportation and building sector, which is not part of the present European Emission Trade System. The energy sector has contributed the most to Germany's overall greenhouse gas reduction since 1990. Along with these programs, the federal government began also to take into account security risks of climate change. Before examining the security approaches of German political actors, it needs to consider whether climate policies and energy practices contradict.

# 3. Contradictions Between Climate Goals and Energy Practices

As explained in the previous sections, Germany has conducted many policies regarding the climate crisis and has issued several climate action plans and packages. However, experts, public, media and climate activists both internally and externally criticize Germany governments because of coal power plants. By 2038, Germany aimes to shut down all coal power plants, which are responsible for the large part of Germany's carbon emissions. While the closing procedure of the power plants is progressing slowly due to the pressures by the

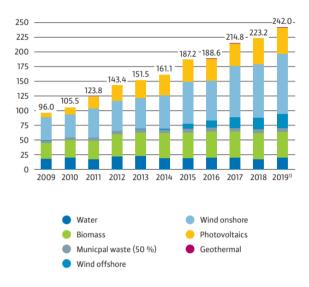
employees and associations in this sector, the plans to open a new coal power plant in Datteln in the North Rhine-Westphalia region on 30 May 2020 caused protests at home and abroad. The workers, who lost their jobs in the other plants that were shut down, also protested the new plant (Waldholz 2019; Proctor 2020).

Although the transition from fossil fuels to renewable energy is envisaged in discursive and goal-oriented terms in Germany, the process works slowly and with some obstacles, as mentioned above. Policymakers regarding the coal are pressured by The Green Party and the environmental groups for the coal industry to keep the process running faster, and by the affiliated business associations and trade unions for maintaining the current condition (Leipprand and Flachsland 2018).

Another problem that Germany faces in fulfilling the climate goals is in the renewable energy sector. In fact, Germany is one of the countries with high rates in the production of renewable energy, especially solar and wind. While it was the first country in the world ranking between 2006 and 2014 in electricity production from solar energy, its ranking started to decrease in 2015 and fell to fourth place in 2018. In terms of installed capacity, it is also in fourth place according to the data of 2020. However, Germany was first in the world ranking in electricity generation from wind energy between 2000 and 2007, but it started to decline in 2008. It ranks third according to 2018 data. In terms of installed capacity, it is also in the same rank in 2020. It should be noted that although Germany declines in the world ranking in both wind and solar energy production, it

increases the amount of production every year, albeit a little (IRENA 2020). Due to the decline in the rankings and the small increases in production, it could be claimed that there is a stagnation in the wind and solar power generation in Germany today. At reasonable level of deceleration were observed in both sectors regarding generation, and more jobs were lost than those in the coal sector. This is because of the legal barriers and public reaction, especially for wind energy. Many individuals who oppose to the foundation of wind farms nearby residential areas take legal actions, thus, obtaining licenses for farms is getting difficult. The procedures supporting this challenging situation are generated in local and national scale. Environmentalists also object it because of its negative impact on wildlife. These conditions may complicate the target of increasing renewable energy in electricity consumption in Germany to 65% by 2030 (Climate Action Tracker 2019; Hessler 2019). As can be seen in the Figure 1, the wind power has still the highest rate in electricity generation among the renewable energy sources.

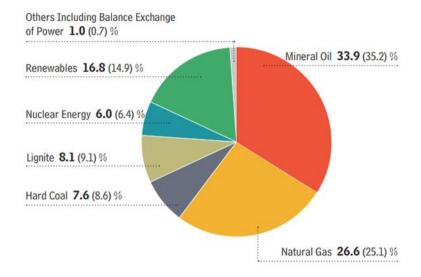
**Figure 1:** Electricity generation by energy source (bnkWh)



Source: BDEW 2020, 25.

Increasing the share of renewable energy in the energy sector is critical for reducing greenhouse gas emissions, whilst the energy sector has the largest share in total greenhouse gas emissions in Germany (Statista 2021). In this context, restructuring the energy sector is an important part of Germany's plans and strategies (Federal Ministry for the Environment Nature Conservation Building and Nuclear Safety, n.d.).

**Figure 2:** Structure of Primary Energy Consumption in Germany in 2020



Total Volume: 11,691 PJ or 398.8 Mtce

Source: AGEB AG Energiebilanzen 2020.

The distribution of energy resources in the total energy consumption of Germany in 2020 is shown in Figure 2 with comparing the data from 2019 (in parentheses). Even if Germany's plans and strategies for the 2030-2050 goals are implemented without any obstacles, it is very unlikely that the renewable energy rate in total supply and consumption will replace other energy sources. As a matter of fact, there are general criticisms that the targets are insufficient and do not contain sufficient political action. As Buschmann and Oels point out, although Germany is one of the leading countries in taking action for decarbonization, it is insufficient

so as to proceed smoothly and to ensure the full transition to renewable energy (Buschmann and Oels 2019).

Another problem with Germany's policies in practice is related to carbon pricing. The carbon pricing, to be applied as 10 euros per ton from 2021 pursuant to the decision taken in the German national parliament, received reactions from various groups and especially the Greens. As a result of the reactions, the decision was rediscussed, and it was decided to initiate the pricing as 25 euros as of 2021 and to increase it up to 55 euros in 2025. At this point, while there are criticisms that poor people will be affected negatively by this pricing in the construction, transportation and heating sectors, it is suggested that the responsibility should be taken by the automotive companies and sectors, by issuing rules such as banning the registration of vehicles using fossil fuels (Climate Action Tracker 2019; Wehrmann 2020; Braun 2020; Deutscher Bundestag (19/24432) 2020).

Regardless of Germany's discourses in the field of diplomacy, goals in adaptation documents, and parliamentary decisions on various issues that are put into practice, when the national interest comes to the fore, it slows down all this effort, and sometimes hinders the process. Under these circumstances, Germany admitted that it could not achieve its target of 40% reduction in greenhouse gas emissions in 2020 compared to 1990. A total of 33% or 34% reduction was expected in greenhouse gas emissions. However, the coronavirus (COVID 19) pandemic that broke out in Wuhan, China in the last months of 2019 caused a total change. Countries have taken various measures due to the coronavirus, declared as a pandemic by the World

Health Organization. Due to these prohibitions including the measures, such as border protection and lockdown, many activities in the energy and industry sectors, ship and air transport, as well as air travel, which have a large share in carbon emissions, were halted. It has been stated by experts that this resulted in decreases in the global scale, albeit low. In a similar vein, the German Environment Minister indicated that the exact impact of the pandemic on German emissions is still uncertain, but the real emissions could be significantly lower than expected, meaning that the 40% reduction target could be achieved. The emissions arising from the energy and transportation sectors reduced significantly due to the impacts of the pandemic. However, it is underlined that the emission amount is almost normal in the transportation sector. In this respect, it is predicted that the pandemic will not result in long-term changes (Wettengel 2020; Liu et 2020; Oroschakoff 2020; Iklim Haber 2020; AGEB AG al. Energiebilanzen e.V. 2020).

Despite the Germany's efforts to apply effective climate policies, the reactions of different political actors and economic sectors affect the implementation process, and the insufficiencies of German climate policies in terms of cutting greenhouse gas emissions and improving renewable energy options are still challenging aspects. Before addressing the attitudes and approaches of different actors in German political life to understand how German political actors in decision-making process evaluate climate change and its impacts on security, the next section focuses on German political actors climate security perceptions regarding climate change.

### 4. Security Perceptions on Climate Change in Germany

To reveal how Germany considers climate change in the context of security, firstly we should examine official security policies and whether they comprise the risks of climate change. Along with the government's approach to climate change, other political actors 'security perceptions should also be addressed. This section especially focuses on the opinions of different actors in German political life and aims to analyse their security approach towards climate change.

### 4.1. Climate Change in the German Security Policies

One of the most important indicators regarding climate change-security nexus is the White Paper (2016), the main document of Germany's security policy, which addresses the issue of climate change as a security problem. In the White Paper, published by the German Federal Ministry of Defense, climate change is indicated as a global danger, and it draws attention to the physical impacts of the problem and the recognition of the problem as a threat multiplier. For this reason, Germany aimed to develop a future strategy considering climate change as a permanent topic in the security agenda of the institutions and forums, such as the United Nations (UN), the European Union (EU) and the Group of Seven (G7).

Following the White Paper, Germany has started a new initiative in accordance with this aim. It founded the Group of Friends on Climate and Security with Nauru (one of the island-states in the South Pacific threaten by the rising sea levels) in August 2018, and encouraged to develop cooperation for tackling climate change as a

security problem (German Information Centre Africa 2018). Furthermore, during its UN Security Council Non-Permanent Membership for the 2019/2020 period, Germany stated that one of its priority goals would be to address the climate crisis as a security issue, and that diplomatic influence would be used to establish permanent policies. It is important to remember that the UN Security Council adopted the first statement on the acceptance of the risks posed by climate change to peace and security in 2011 at the German-chaired Council (Permanent Mission of Germany to the United Nations; Climate Diplomacy n.d.a; Climate Diplomacy n.d.b; CLEW 2018). Additionally, upon the attempts of the German Foreign Ministry, all countries were immediately called to discuss climate change, as one of the most crucial global security and foreign policy problems in the 21st century, and after the Berlin Call for Action was launched in 2019, the process to the Berlin Climate and Security Conference was initiated (German Federal Foreign Office 2019; German Federal Foreign Office n.d.).

# **4.2.** Attitudes of German Political Actors Towards Climate Change

The position of political actors should undoubtably be considered to understand the orientation of German climate policies. Policymaking and decision-taking processes refer to a complex procedure in which many actors are involved. Different perspectives and policies of the political parties represented in the national parliament are of paramount importance in fulfilling the goals specified in the decisions. In this study, it was aimed to include the

opinions of political parties and main institutions, which play an important role in the policymaking process related to the environmental issues.

During the study visit held with the Bogazici European School of Politics on 24-30 November 2019, upon the invitation of the German Ministry of Foreign Affairs, interviews were made with the representatives of Social Democratic Party of Germany (SPD), the Christian Democratic Union (CDU), representatives predominant majority in the German parliament, the representatives of the Environment and Energy Ministry, and the Federal Parliament. In this regard, the structured interview method was conducted, and the each representatives of political parties and institutions was questioned how they approach climate change as a security threat and which of the state, individual, international system, or ecology they prioritize in the policy practices. At the end of the study, the differences and similarities between the answers were evaluated within the framework of the referent object of climate policies. The outputs of these interviews helped to evaluate whether these actors influence the decision-making process on the basis of the traditional, common/international, human and ecological security approaches.

The SPD and CDU are the two major and oldest political parties active in the German political life. While the SPD is in a center-left position, the CDU positions in the center-right. When the SPD's political programs are examined, it is seen that the party takes into account the climate change issue. The election program published

before the 2021 federal elections includes a separate sub-title for climate change. In this section, it is underlined that stopping climate change is a humanitarian task. In this regard, the party's approach to climate change is based on raising the share of electricity generation from renewable energy sources to 100% to meet climate goals and radically changing the way Europe lives, consumes, and produces to counter climate change, species extinction, and excessive raw material use (SPD 2021). In the interviews with the SPD party representatives, they stated that especially the young generation is interested and active in the climate crisis issues. It was indicated that the general policy of the party is to adopt sustainable and environment-friendly production and lifestyles. They also underlined that they consider low-income groups in regulations, and that they differ from the CDU and the Greens in this respect.

Carrying out joint studies with environmental non-governmental organizations, the SPD urged that they prioritize the projects that use sustainable and environment-friendly construction and materials in housing construction and aim at increasing public transportation. It was also added that innovative technologies that reduce the negative impacts on the environment, such as renewable energy and wind energy, are leading in the SPD's policy approach. In this regard, the SPD's approach to the climate crisis has been concluded to be traditional and human security-oriented as they prioritize the environment and human factors.

On the other hand, the position of the CDU regarding the climate crisis is mostly economy based. When the CDU party policy

and the election program published before the 2021 federal elections are examined, it is seen that CDU addresses climate change and environmental protection in the context of economic sustainability and growth (CDU 2021). During the interview with the CDU party representatives, short answers were received to the questions. According to the answers, it could be concluded that the party approaches the climate crisis by prioritizing housing, infrastructure and business world, and emphasizes Germany's leading role in technology and industry. In this respect, it could be claimed that CDU acts traditional state-centric orientation by prioritizing the economic needs vis-à-vis the climate crisis.

The Green Party, officially called the Alliance 90/The Greens, was formed in the 1980s by the combination of a series of social protest movements and natural environmentalist stances, from opposing nuclear power plants to LGBT+ movement (DW 2017). The party became renowned in the early 2000s, when it became a partner in the coalition government with the SPD, under the leadership of Gerhard Schröder, and taking charge of the Foreign Ministry with Joschka Fischer, as well as several other ministries. After the nuclear disaster in Fukushima, Japan, the Green Party, by putting environmental problems in the center of its political struggles, gained the support of people regarding ecological politics and won the administration of the third-largest state in Germany with its policy in Baden-Württemberg, where there were four nuclear reactors (Arisoy 2016). In addition, the influence of the Green Party is significant in the following decisions taken by the German government: ending

nuclear power generation by 2022, shutdown of all still active nuclear power plants, transition to the fixed carbon price by 2021 and shutdown of 17 coal plants by 2030. By doing so, Germany demonstrates that it aims for substantial developments in electric transportation and energy efficiency by generating most of its energy needs from renewable sources, such as solar and wind energy. Considering that the Alliance 90/the Green Party has environmental priorities due to its founding philosophy and the studies it conducts, the party approach could be assessed as ecocentric.

Although the climate crisis and the role of human beings in this crisis are accepted in Germany by broad communities, it should be noted that there are groups of people thinking otherwise. Even though an interview could not be done with the Alternative for Germany (AfD), the right-wing populist party in Germany, according to its views declared in the assembly and broadcasted in the media that the AfD accepts a change in the climate, but does not approve that it has been caused by human-related activities, thus, it criticizes the climate action policies (Wettengel 2019).

In addition to the policies and views of the parties, two significant institutions that influence the decision-making process in the climate policies, the Ministry of Environment and Energy, and the Federal Parliament were added into the study framework. In the interview with the representative of the Ministry of Environment and Energy, when asked about the areas prioritized in the climate crisis, the representative emphasized the importance of air pollution and human health. On the other hand, the need for global responsibility

and cooperation was underlined in all measures taken and to be taken regarding the climate crisis. It was indicated that the local is important as much as a struggle in coordination with the EU seem necessary. It was also added that the general attitude in Germany regarding the climate policy is shaped with bans, incentives and individual attempts. Another point underlined was the decision taken by Germany to terminate nuclear and coal energy. This decision is significant, considering that the most of the criticisms against Germany originate from its coal-related policies. Thus, it could be concluded that the approach of the ministry comprises of the traditional, common and humanitarian perspectives.

In the interview with the official from the Federal Assembly, when asked about the role of the parliament in the decision-making process specific to the climate policy and the reference point of their approach to climate change, he replied that the parliament is playing a crucial role on the codification of laws on the environmental protection. It was stated that the parliament had a significant role in the decisions, such as issuing the obligation to pay for carbon dioxide production, followed by a 30% reduction in energy consumption, doubling GDP, and terminating nuclear energy (mentioned about the negative impact of this decision as there is no carbon dioxide emission in nuclear energy). However, it was added that the present regulations and solutions are not sufficient for Germany to achieve its goals. Upon solely these answers, it is not easy to reveal the political position of the assembly; but it could be claimed that the tendency of the assembly for climate change is principally economy-oriented.

The interviews with the political parties and institutional actors confirm that the national security approach prevails Germany's climate policies. The parties and institutions were asked about their approach to the climate crisis and whether they refer to the state, individual or ecological system in the policies they follow. In the light of the outputs of these interviews, different political actors' perceptions on climate change-security nexus are classified in the Table 1. As a result, all of these actors playing an influential role on the policymaking process considers the national interests in the framework of traditional security. At the same time, while the federal institutions perceive climate risks as a common security issue due to its global impacts, the SPD and the Ministry of Environment and Energy consider rather the human security perspective. Although the Alliance 90 representatives could not be reached, their programs show that their political attitude towards the climate crises is consistent with the ecological security perspective.

**Table 1.** German Political Actors' Approaches towards the Climate Crisis

Environmental Security Related Approaches	Traditional Security	Common Security	Human Security	Ecological Security
Actors	The CDU, the SPD, the Ministry of Environment and Energy, the Federal Assembly	The Ministry of Environment and Energy, the Federal Assembly	The SPD, the Ministry of Environment and Energy	The Alliance 90 (The Greens)

As pointed out in the previous sections, Germany is one of the leading states taking action in the struggle against climate change. It acknowledges the security risks of the climate crisis. On the other hand, even though Germany takes persistent steps for the policies implemented in the context of mitigation of and adaptation to climate change, the incapability of the country to take radical decisions and the problems in the implementation processes affect the performance of the country in the climate combat. The reason for this contradictory situation could be relied on the economic priorities of the country and the perspectives of policymakers, focusing on the economic loss. Moreover, it could also be claimed that the variety of the "referent

objects", threaten by the impacts of climate change, and the ambiguity in terms of defining which/who should be protected first from the climate crisis. In the light of the policy documents, it could be argued that Germany recognizes the security risks posed by the climate crisis and emphasizes on the importance of international cooperation. However, the political actors in the country have acted with different priorities vis-à-vis the climate crisis; due to the lack of a holistic approach the focus of the climate policies and security has remained blur and the referent objects of the policies have varied in the perceptions of climate risks on the state, international system, individuals or ecosystem.

Moreover, as political actors' perceptions on political and national interest influence their attitudes towards the security risks of climate change and their preferences on the referent object, some obstacles could occur in the decision-making and implementation processes such as greenhouse gas reductions. For this reason, the efforts for reducing fossil fuel use and the greenhouse gas emissions or decarbonization, a vital measure to maintain the ecological balance and to save the future of the planet with its biodiversity and human civilization, might generally be slowed down by the conflicting political interests. As a consequence, the lack of radical measures to cope with the climate crisis and the prioritization of the national interests instead of common challenges increase the vulnerability of the disadvantaged communities, nations, regions, and the discrepancies in terms of inequality and injustice have actually been hampering the climate resilience of the global system.

When the Germany's climate policies are examined, it could be resulted that Germany adopts and implements essential national measures to combat the climate crisis. Moreover, it could also be claimed that the state, national institutions and certain economic sectors have taken responsibilities for the change. The emission-cut policies adopted with 2020, 2030 and 2050 plans support this argument. In the meantime, Germany supports global and regional cooperation in both the United Nations and the European Union. Its commitment to the UNFCCC, the Kyoto Protocol and the Paris Agreement determined the orientation of country's decisions and actions. Therefore, a common security perspective could be found in Germany's participatory and cooperative attitudes towards the climate However, despite all these efforts and commitments, crisis. Germany's traditional security perception on climate change has apparently prevailed. The economy-oriented national interests play a significant role on the formation of climate policies, and usually slow down the climate resilience. The most explicit indicator of this phenomenon is the reluctance to withdrawal from coal energy, despite all pledges and targets. As a matter of fact, the opening of a new coal plant recently in Germany reveals the inconsistencies regarding the 2038 goal to terminate coal energy. Undoubtfully the consequences of the closure on the workers, energy sector and economy have been taken into account by the government. These factors demonstrate that national interest, in other words, the traditional security perception is still dominant in Germany's climate policies, even though the

common and human security perspectives are reflected on certain perceptions.

### Conclusion

This study focuses on Germany's climate change policies and aims to analyze essential policy documents on climate change and to reveal the perception of different political actors towards climate change. Climate change has become an existential problem for the life on Earth. Therefore, the responsibility of states, the most influential actor of global system, is still crucial for the mitigation and adaptation processes. In this context, the policies especially of developed countries, as the most important greenhouse gas emitters, have gained great importance. These countries' emission-cuts, investments on renewable energy and their financial and technical assistance for lessdeveloped nations could be create a difference for coping with the climate crisis. Despite the efforts of Germany to reduce carbon emissions and to develop its renewable energy capacity, the country is still relied on the fossil fuels for the energy production and consumption and among the top carbon emitters; hence its climate targets and policies are criticized to be insufficient. Another important point regarding the German climate policies is the perceptions on the climate change and security nexus. According to the results of this research, the climate crisis is accepted as a security issue in Germany, but how the political actors perceive this crisis as a security matter differentiates regarding their priorities. All political actors including federal institutions, such as the Ministry of Environment and Energy, and the Federal Assembly, the CDU and the SPD prioritize the state-

centered traditional security approach. However, the perception of climate risks as a common security issue is reflected on the perspectives of the ministry and the assembly. The SPD and the Ministry of Environment and Energy also consider the risks of climate change for the human security. The only political actor takes into account the ecological security perspective seems to be the Alliance 90 comprising the Greens. As the climate crisis is deepening, it should be asked whether the new German government forged with the coalition of SPD and the Greens could took a bold step to transform the climate policies.

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