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Green Deal Agreement and Possibilities of its Application in Turkey

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ABSTRACT | Objective: The objective of this study is to analyze Turkey's alignment with the European Union's Green Deal and climate change strategies, evaluating the opportunities and challenges for Turkey in transitioning to a carbon-neutral economy by 2050. **Method:** This research employs a SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats) to assess Turkey's position concerning climate change mitigation efforts, particularly focusing on compliance with the EU Green Deal and other international climate agreements, such as the Paris Agreement. **Results:** The analysis identifies significant strengths, including Turkey's potential to adopt carbon-free growth models and the benefits of aligning with EU environmental policies. However, weaknesses such as inadequate public awareness and financial constraints hinder progress. Opportunities include increased trade with the EU and enhanced environmental protection, while threats include potential economic priorities conflicting with climate goals and societal resistance to rapid change. **Conclusions:** Turkey has substantial potential to benefit from adopting the European Green Deal, but success depends on improving public awareness, infrastructure, and financial support. Enhanced cooperation with the EU and policy adjustments will be critical to achieving sustainable development goals and a carbon-neutral economy by 2050.

Keywords | Climate Change, Green Deal, Turkey, Carbon Neutrality, EU Environmental Policy

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INTRODUCTION

Environmental problems appear due to the damaged environmental values caused by various activities that people perform (Kaypak, 2013). Environmental problems can be expressed as the negativities that people give to the environment in the process of intervening and benefiting from nature (Aydın & Çamur, 2017). It is also clear that environmental problems are not regional, they are global and they affect all societies (Kılıç, 2001).

Also, no phenomenon is more effective in disrupting natural flow and changing the climate than the presence of human power. Therefore, greenhouse gas emission is the most important factor in climate change. Climate change leads negativities for the ecosystem and raises possibility for natural disaster encounters in general. Reduction in water resources-reserves, rising temperatures, experiencing precipitation above seasonal norms are attached to effects of the climate change. These long-lasting problems follow each other as if they are the rings of a chain. (Engin, 2019).

In this study, it was intended to give information about the process of combating climate change in the world, in Turkey and in the European Union. In addition, it was aimed to detail and summarize Turkey's position in this struggle process with a SWOT analysis in the light of the Green Deal Consensus.

Effects of Climate Change in the World

The United Nations Framework Convention on Climate Change – UNFCCC defines climate change as following. “Besides the natural climate change observed in comparable time periods, it is defined as a change in the climate because of human activities that directly or indirectly disrupt the composition of the global atmosphere” (Arıkan, 2012). It is also defined as a change in water, air and soil pollution.

Pollution: Big Cause

Pollution can be defined as the process of making air, water, soil, and relevant natural resources dangerously dirty. By this rising dirt, the resources become not suitable for use of people or other living species. Pollution has also been related to global warming as a significant and devastating phenomenon for the World.

It is a widely agreed phenomenon that the process of global warming is speeding up because of human – caused effects today and that climate change has reached a level that will affect the future of societies (MacCracken 2001, IPCC 2001, Cook et. al, 2013). Climate change has been on the policy agenda in Turkey since the beginning of the 2000s. In this process, embodied by the establishment of the Climate Change Coordination Board in 2001, climate change is not only referred in documentation documents but also incorporated in national plans and urbanization policies (Albayrak and Atasayan, 2015). Countries and global companies which precede sustainable development, economic growth, think that a solution that will stop existing while not advocating a return to the production system would upset the ecological balance of the world. Yet to enter a phase of growth in developing countries, developed countries are mainly responsible for global warming as a priority of economic inequality, which stated that between their countries should be eliminated. Environmentalists say that the policies of continuous growth and rapid development should be abandoned immediately. The extent to which the idea of “Sustainable Development”, which has been put forward as the most balanced formula since the 1980's, can respond to the thoroughly added problem is a matter of debate (Reyhan and Reyhan, 2016).

On the other hand, some countries established the vast majority of mandatory carbon markets under the Kyoto Protocol of the United Nations Framework Convention on Climate Change, signed in 1997. The Kyoto Protocol stipulates that industrialized countries have to withdraw from the 1990 level on average by 5.2 % between



2008 and 2012, which was the first commitment period. Developing countries do not undertake any emission commitments under the motto of “common but differentiated responsibility” (Güldoğan, 2010). Therefore, the areas that need special attention within climate change and whose negative effects are expected to become widespread in the near future can be specified as air pollution due to water pollution and carbon emissions.

The last significant cause is water pollution. As well known, water is also an important natural resource of which the scarcity directly threatens the security of states and sustainability of livelihoods. In addition to ensuring the continuation of the life of all livelihoods, water is necessary for the development of economic, social and cultural life as well (Tuğaç, 2014). The negative effects of climate change on water reserves and rising drought incidences are already being recognised.

Effects of Climate Change in Turkey

Turkey formed the concepts related to environmental pollution in the 1970s, when the EU faced this problem in the same years. They deal with the fight against environmental pollution and evaluations in relation to economic growth and development. It can monitor significant change in this area within the framework of development plans. In the Development Plans made until 2000, environmental evaluations have always remained in the background, and it has been created the plans based on the possibility that environmental policies may harm national development efforts. However, with the Eighth Five-Year Development Plan, the policies applied for the solution of environmental problems and the efforts to harmonize the decisions taken with the European Union norms and international standards were included.

The National Environmental Strategy and Action Program, which was prepared within the process of forming Turkey’s environmental policy and started in 1995 and completed in 2000, has an important place. The objectives of this program include preventing air/soil/water pollution, facilitating access to environmental infrastructure and services, encouraging the use of renewable resources, and creating policies that will make the environment and the economy sustainable (Çokgezen, 2007; Yıldırım & Budak, 2005). The voluntary carbon trade has also been implemented in Turkey since 2006, which has become widespread in countries that have not signed the Kyoto Protocol and therefore do not have greenhouse gas reduction obligations as well. Most of the projects in voluntary carbon trade in Turkey are related to energy sector (Bal, 2013).

The Kyoto Protocol was signed in 1997 and entered into force in 2005, contents some principles against Global Climate Change. The goals of this agreement are to decrease and control greenhouse gas amount on atmosphere will be reduced to 5 %, spend less and clean (carbon zero) energy for machines and transportations, encourage using green energy – like bio diesel, reduce the rate of methane and carbon dioxide released into the atmosphere etc.

There are projects and activities developed and implemented in Turkey to reach the afore mentioned targets and to rise adaptability of the country to the Protocol.

Bandırma Wind Power Plant (BARES) with 30-Megawatt power, which is the first greenhouse gas reduction project in the country, is an example for these projects. The plant, which was constructed and managed by the consulting company Futurecamp GmbH, has reduced annual carbon emission to 72,000 tons of CO₂ (Taşdan, 2009). Therefore, it can be said that environmentalist steps in Turkey have been taken, even though there required more efforts. In addition, the “European Green Consensus – EU Green Deal” that was dated on 11th of December 2019, is a roadmap that aims to reorganize the previous commitments of the European Union (EU) in a broader and more effective way to tackle climate and environmental challenges. New strategies will be determined to achieve the goals of economic growth while reducing natural resource consumption and zeroing the net emission value of greenhouse gases (carbon neutral) in 2050 (Anonymous, 2020; Anonymous 2020).



Green Deal – European Green Consensus

The regulations brought by the EU focused on combating climate change, the incentives it provides and the steps it wants to maintain after the Paris Agreement, which was signed on April 22nd, 2016. When the Paris Agreement was examined in depth, the sensitivity of the EU, which seems to be one of the most efficient implementers, is seen in the Constitutional Court. The EU has reflected the European Green Consensus, from end-user product supply that may affect climate change, to household level energy consumption and even to agricultural policies, although it is not limited to certain sectors (Şahin and Önder, 2021).

The European Green Consensus is the name given to all action plans implemented by the EU to play a dominant role in the fight against the climate crisis and global warming. This agreement includes a series of regulations aimed at making all EU member states carbon neutral by 2050. We can list the main EU regulations and policies on the subject as follows (European Commission, 2019):

- EU emissions trading system
- Member states' targets for non-emission trade sectors
- Contribution of forests and lands to combating climate change
- Reducing greenhouse gas emissions in transport
- Energy efficiency and renewable energy investments
- Supporting low carbon technologies
- Stage down of fluorinated greenhouse gases
- Protection of the ozone layer
- Preparing for the effects of climate change
- Climate change investments

In this context, the EU implements a series of measures, especially the climate law and the carbon limit tax, within the relevant agreement. Simultaneously, the EU is trying to support this process by creating various transition funds to enable companies to switch to green energy and move away from carbon and fossil-based energy and fuel. Over the next 10 years, the size of Europe's environmental projects is estimated to exceed one trillion Dollars (European Parliament, 2020).

In Paksoy's (2019) study of "The Current Situation of Turkey's Climate Action", it was seen that Turkey did not struggle adequately in combating global climate change in 2008-2017, and in comparison, with the EU countries, it maintained its weak position among these countries. After recognition of this situation, it was agreed on once more that Turkey should be active in combating global climate change because of its binding responsibilities stemming from both the UN's climate change protocol and the EU climate accords.

Evaluating the Position of Turkey in the Framework of Combat with Climate Change

In this study, Turkey's compliance with the European Union Practices on Climate Change - Green Deal toward climate change has been examined with the SWOT Analysis method. Although SWOT analysis was introduced in the 1960s, it has been updated and turned into an important strategy development tool for social sciences (Andrews et al., 1986).



Strengths

- Turkey has the power to take initiative politically and socially to develop a carbon-free economic growth model based on energy and material-efficient circular economy instead of carbon-based economic growth.
- Adoption of the practices will support Turkey's compliance with the environmental policy in the EU accession process.
- Reducing import expenditures for items such as petroleum, coal and natural gas is considered as a significant benefit for Turkey.
- Willingness to strengthen environmental law and the tendency to reduce bureaucracy will contribute to the rapid development of the process.

Weaknesses

- Turkish social structure does not have sufficient knowledge and experience on this field.
- Education courses in primary and secondary level have insufficient coverage of environmental awareness.
- Insufficient awareness of the clean city in the society constitutes a barrier against evolution.
- Existence of bureaucracy in the individual / state mechanism and deficiencies in the organizational structure of local governments will not speed up the adoption process.
- Financing issues. Even planned actions were not implemented due to financial difficulties.
- Inadequate infrastructure disables further investment and movement.
- Lack of legislation within environmental protection and environmental sustainability disables society level participation on the process.
- Lack of non-governmental organizations to work on urbanization and green spaces and insufficient public awareness on civil society.

Opportunities

- The high use of social media by the young population and the fact that their interest in the issue can be easily achieved in this context.
- The high contribution of countries with a clean environment and green area and high tourism potential to GNP makes it possible for green consensus to be achieved faster in touristic areas.
- Accelerating the harmonization with the European Union countries is expected to increase trade.
- Providing convenience in air pollution control by reducing carbon emission will be faster considering the existence of power plants and potential to establish new ones.
- The fact that the young population can be educated by working on the content of Environment courses in primary and secondary education levels.
- Meeting recreation needs of people in developed and protected environmental areas will drive their interest to environmental protection more
- Ensuring easy access to financial resources and funds of the European Union will be contributory and employment for environmental protection may be increased in this way.
- Creating investment opportunities for the public and private sector will increase positive financial effects of the process.



- Legislators will be directed to improve application of Environmental Law.

Threats

- Possibility of public administration to affect the process inversely by not taking ownership of structural changes and the process appear as a problem.
- Concerns that the expenditures made on this issue will not be covered by the required budget distract states as well as enterprises.
- The fact that public opinion cannot be changed in a short time and the possible negative impact of this on the changing process.
- Existing studies will contradict with the interest of conventional producer / industrial groups in the countries.
- Economic priorities do not overlap with the goals of the reconciliation process

RESULTS AND DISCUSSION

As a result of the analysis, it has been seen that it will be very beneficial for Turkey, if state authorities agree with the Green - Deal Agreement. When the strengths are examined, it was understood that the chance of getting a share from economic development and providing personal economic freedom will be very important for the country. Especially rising freedom will contribute creation of sufficient employment opportunities. Apart from this, the factors of providing the necessary conditions for protection of physical and mental health and raising awareness on the protection of natural energy resources are also important factors among the strengths.

Looking at the weaknesses, it can be shown that the Turkish society does not have sufficient knowledge and experience on this topic. It is possible to overcome this problem with publications and extension activities. In addition, public communication can be made by activities like advertising and demonstration. Increasing the awareness on the subject with publications is an important detail. In parallel with the reasons, we have mentioned above, the clean city consciousness does not suit well in the Turkish society. Apart from these, another detail that needs to be emphasized is bureaucracy. It is a big problem that the citizen cannot reach the state and the state cannot accurately reflect what the citizen wants. This problem also makes it difficult to organize Green Deal adoption in local governments. Factors such as legislative deficiencies, difficulties in financing, and lack of infrastructure should not be ignored. One of the most important problems is that the organization on this issue is very low in Turkey. Public and non-governmental organizations must be more active.

Looking at the opportunities, it is possible to see issues related to strengths and weaknesses.

For Turkey, as a developing country, the development of cleaner and more liveable cities by making the necessary investments, the acceleration of employment and economy in parallel, the contribution of clean environment and green areas to the GNP of countries with high tourism potential, increasing trade with EU countries and most importantly, it is possible to control air, water and soil pollution due to the increasing population and industry.

When the threats were analysed, it should be kept in mind that the loss of public trust in this direction may be an important threat. Considering that the consciousness of the society in this direction is low, it is certain that this is a correct statement. In addition, the possibility that the activities to be implemented cannot be financed as a due to lack of proper plans and prolongation of the awareness rising process of the society on the environment

issues., and the negative impact of this situation may be significant threats. Apart from these, it may not be pleasing to have studies contrary to the interests of a certain class in the country.

In this context, the potential suggestions can be listed below.

1. For the Green Deal Reconciliation, the infrastructure must be set up and prepared in a short time.
2. The society should be made aware of various publication activities. The Green Deal should be explained to people by making various publications from internet media, television and newspapers. It should be aimed to increase the awareness of every segment of the society with the necessary publication activities.
3. It should be developed and updated the Environmental Law by legislators.
4. The organizational structures of local governments should be improved. In this regard, the intensity of bureaucracy forces the execution. Bureaucracy should be reduced.
5. For companies that will export to the EU countries, it is imperative that inspections are tightened and illegal actions are prevented.
6. Care should be taken to protect the environment and green areas in order to increase tourism revenues, also called chimney-free industry.
7. Organizational awareness should be developed. If necessary, the state should take steps in organizing and the non-governmental organizations should be encouraged to be more active in environmental issues. Approximately there are 2500 NGOs across the country (OR - DA, 2015)
8. In order to prevent soil, water and air pollution, the existing environmental problems should be brought under control with various dissemination studies and official controls to increase awareness.
9. The necessary financing should be provided in this regard and the state should be a leader in financing. In this regard, the Ministry of Environment and Urbanization should use its budget in accordance with planning and create funding sources if necessary.
10. People who have a say in the society, leading farmers, etc. People like that should lead the way in instilling awareness in the society.
11. Most importantly, every member of the society should be aware of what kind of environment they will leave for their children and grandchildren in the future.

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