

# ROLE OF PUBLIC INSTITUTIONS AND SOFT LAW IN CLIMATE CHANGE GOVERNANCE AFTER PARIS AGREEMENT: EUROPEAN GREEN DEAL AS A CATALYST AND THE CHANGE IN THE ADMINISTRATIVE AND LEGAL SET-UPS IN THE CASE OF TÜRKİYE

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## *Abstract*

*Climate change has been urging states not only to act but also to cooperate with relevant stakeholders at any level. Paris Agreement, which is considered as the latest and most radical guide in climate change adaptation processes, has accelerated this effort and has been paving the way for changes in the organizational and legislative set-ups of the signatory states. The aim of this study is to understand how organizational and legislative structures have changed in the countries which ratified Paris Agreement and to understand the characteristics of the climate change governance model brought about. It tracks these changes in the case of Türkiye which has been undergoing significant changes in terms its organizational and legislative set-ups and climate policy governance since the ratification of Paris Agreement in 2021. The research also stresses the catalyzing role of the European Green Deal in*

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*the climate change adaptation processes, which further perpetuates the goals of Paris Agreement and requires taking concrete steps in this regard.*

**Keywords:** *Public Institution, Soft Law, Climate Change Policy, Governance, Paris Agreement*

***Paris Anlaşması Sonrası İklim Değişikliği Yönetişiminde Kamu Kurumlarının ve Yumuşak Hukukun Rolü: Bir Katalizör Olarak Avrupa Yeşil Mutabakatı ve Türkiye'nin İdari ve Hukuki Yapısında Meydana Gelen Değişiklikler***

**Öz**

*İklim değişikliği, ülkelerin yalnızca eyleme geçmelerini değil aynı zamanda gerekli düzeylerde ilgili paydaşlarla iş birliği yapmalarını da zorunlu kılmaktadır. İklim değişikliğine uyum süreçlerinde bir kilometre taşı olarak kabul edilen Paris Anlaşması, bu alandaki çabaları hızlandırmış ve anlaşmaya taraf olan ülkelerin idari ve hukuki yapılanmalarında önemli değişikliklerin önünü açmıştır. Bu çalışmanın amacı, Paris Anlaşmasını onaylamış olan ülkelerde idari ve hukuki yapıların ne gibi değişikliklere uğradığını ve iklim değişikliği alanında nasıl bir yönetim modelinin ortaya çıktığını anlamaktır. Çalışma, söz konusu değişiklikleri, 2021 yılında Paris Anlaşmasını onaylayan ve o tarihten bu yana iklim değişikliği ile ilgili idari ve hukuki yapılanmasında ve iklim politikası yönetiminde kayda değer düzenlemelere giden Türkiye örneği üzerinden incelemektedir. Paris Anlaşmasının hedeflerini pekiştirip bunlar için somut adımlar atılmasını gerekli kılan Avrupa Yeşil Mutabakatının iklim değişikliğine uyum süreçlerindeki katalizör (hızlandırıcı) rolü üzerinde durmaktadır.*

**Anahtar Kelimeler:** *Kamu Kurumu, Yumuşak Hukuk, İklim Değişikliği Politikası, Yönetişim, Paris Anlaşması.*

**Introduction**

Climate change has become a top issue in almost all countries as its legacies such as natural disasters, wildfires, floods, drought, extreme weather events and the like have become severe and frequent all over the world. Main cause of climate change has been detected as global warming caused by the increase in average global temperatures due to the increase in greenhouse gas (GHG) emitted by human activities - among which the increased pace of industrialization has the biggest share. Having serious effects on a wide range of fields including agriculture, demography, economy, and many more and having strong global connotations, this issue has been urging public authorities of all levels not only to act but also to cooperate.

Having realized that global warming and the climate change it has been causing is a global issue affecting all countries, states have taken steps for collective action to combat against and more precisely to adapt to this issue. Among these efforts, Paris Agreement (PA) is regarded as the groundbreaking guiding document leading to serious changes in both organizational and legislative set-ups of its parties in formulating their climate change policies.

This research aims to analyze the changes in climate change adaptation policies of Türkiye after the ratification of the PA, by mainly looking at the role of soft law and public institutions as the main tools of the adaptation process, which have been paving the way for the emergence of hybrid models in the legislative and administrative set-ups of the country. It recognizes the catalyzing role of the European Green Deal (EGD) in climate change adaptation processes as a prominent document supplementing the implementation of mandates of the PA. The research emphasizes having an interdisciplinary outlook and reflecting both public administration and law perspectives on the studies which analyze the climate change adaptation processes, in which the roles of public institutions and soft law regulations deserve utmost attention. Moreover, it stresses that re-conceptualizations of the concepts such as globalization, governance, and new deal on a “green” basis as “green globalization”, “green governance” and “green new deal” be reflected on climate policy studies, particularly when focusing on soft law and public administration.

These “newly green” concepts have been utilized in the studies examining climate change adaptation processes<sup>1</sup>. There has been various research on climate change adaptation and governance in Türkiye analyzing the issue from different perspectives, including the role of local governments and urban governance in this process<sup>2</sup>; role of different actors in climate

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<sup>1</sup> Ahmet Atıl Aşıcı and Zeynep Bünül, “Green New Deal: A Green Way out of the Crisis?”, *Environmental Policy and Governance*, Env. Pol. Gov. 22, (2012): 295–306, DOI: 10.1002/eet.1594; Edward B. Barbier, A Global Green New Deal Executive Summary, Report prepared for the Green Economy Initiative and the Division of Technology, Industry and Economics of the UN Environment Programme, 2009. Available at: [http://www.edwardbarbier.com/Publications/a\\_global\\_green\\_new\\_deal-executive\\_summary.pdf](http://www.edwardbarbier.com/Publications/a_global_green_new_deal-executive_summary.pdf) (27.05.2024); Yusuf Erbay, “Yeşil Yeni Düzen ve Yeşil Liderlik” in *Yeşil Yeni Düzen*, Ankara: İmge Kitabevi, (2023): 95-164.

<sup>2</sup> Mustafa Demirci, “Kentsel İklim Değişikliği Yönetişimi”, *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, Sayı: 46, Temmuz-Aralık 2015, (2015): 75-100.; Mahir Yazar and Abigail York, “Urban climate governance under

change governance<sup>3</sup>; analyzing global climate governance and its non-state actors<sup>4</sup> and climate justice/urban adaptation justice<sup>5</sup>. There are studies which analyze legislation and institutional capacity in Türkiye regarding climate change adaptation policy<sup>6</sup>. However, neither of the studies conducted about climate change adaptation process in Türkiye so far focused on the role of public institutions and soft law as the main tools of this process. Therefore, what makes this research unique is the effort it makes to analyze the climate change adaptation process by focusing on the role of public institutions and soft law as the leading actors in this process and to point out to the emerging hybrid models in the administrative and legislative set-ups and climate change governance of the country.

In this research, “emerging hybrid model” is used to refer to the “attempts” to insert hard law into the prolonged soft law-led climate change adaptation processes and to the “attempts” to insert bottom-up, participatory mechanisms into the prolonged top-down, ministry-led climate change adaptation processes. These “attempts” become more frequent and visible after the ratification of the PA, and particularly after the issue of European Green Deal, thus paving the way for “the emergence of hybrid models” where hard law regulations started to cohabit with soft law regulations and bottom-up models started to be practiced besides top-down models.

This is descriptive and explanatory qualitative research which relies upon primary and secondary sources. In the case study, firstly, it tracks the changes

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the national government shadow: Evidence from Istanbul”, *Journal of Urban Affairs*, (2021): 1265-1281. <https://doi.org/10.1080/07352166.2021.1915151>.; G. Duygu Butun-Bayindir, “How do transnational municipal networks affect climate policymaking? A qualitative study in Turkey”, *Journal of Urban Affairs*, 43:8, (2021): 1081-1099.

<sup>3</sup> Yunus Emre Özer, “İklim Değişikliği Yönetişimindeki Aktörlerin Analizi ve Türkiye”, *Uluslararası Yönetim İktisat ve İşletme Dergisi*, Cilt 13, Sayı 4, (2017): 833-851.

<sup>4</sup> Bengü Aydın-Dikmen, “Global Climate Governance between State and Non-State Actors: Dynamics of Contestation and Re-Legitimation”, *Marmara Üniversitesi Siyasal Bilimler Dergisi*, Cilt 8, Özel Sayı, Aralık 2020, ISSN 2147-6926, (2020): 59-79 • DOI: 10.14782/marmarasbd.763831.

<sup>5</sup> David Samuel Williams, Osman Balaban, Akgün Ilhan, Hande Paker, Ümit Sahin, Beyza Sarıkoç Yıldırım, Ethemcan Turhan, Baran Alp Uncu and Marta Olazabal. “A policy content analysis for evaluating urban adaptation justice in Istanbul”, *Environmental Science and Policy*, 136 (2022): 476-485.

<sup>6</sup> Zerrin Savasan, “Climate governance in Türkiye: a forward-looking perspective”, *Turkish Studies*, 20:4, (2019): 541-571. DOI: 10.1080/14683849.2019.1613895.

in the administrative structure within which climate change issues were used to be administered. In tracking the changes brought about by the PA to public administration in terms of its role in climate change adaptation processes, the related public institution - mainly the Ministry of Environment, Urbanization and Climate Change (MEUCC) and to a certain extent the Ministry of Trade (MoT)- are analyzed with respect to the changes they have gone through in their organizational set-ups and responsibilities. Secondly, it analyzes the change in legislation – including hard and soft law regulations. While examining their characteristics in terms of being hard or soft law tools, primary sources such as the international agreements, acts and the like are analyzed not only in terms of their banners/titles but also in terms of their containing sanctioning mechanisms or not. By so doing, this study intends to reveal the trends prevailing in legal documents targeting climate change.

First part gives brief information on the significance of PA and the steps taken until its adoption both in general and in the case of Türkiye, together with the catalyzing role of the EGD in the implementation of its mandates. Second part is about theoretical and conceptual framework where the relevant discussions on the conceptualization of governance, soft law and hybrid model approaches are elaborated on with a view to understanding climate change adaptation processes. Third part focuses on the role of public institutions in climate change adaptation in Türkiye after the ratification of PA. Fourth part analyzes the role of soft law in climate change adaptation in Türkiye in the post-PA period. Fifth part elaborates on the results of the research together with a brief discussion on the emerging hybrid models for climate change governance in Türkiye in the aftermath of PA where public institutions and soft law have been the main actors.

### **I. Significance of Paris Agreement**

The first attempt to handle climate change on a globally collective basis was the *United Nations Framework Convention on Climate Change (UNFCCC)* which was signed in the Rio Conference in 1992. The main motive was to act against the increase in GHG (CO<sub>2</sub>) emissions and in global average temperature. CO<sub>2</sub> emissions (kt) was detected to increase from 21,284,043 in 1990 to 21,440,490 before the signature of UNFCC<sup>7</sup>. The increase in global average temperature was detected as 0.59 Celsius in

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<sup>7</sup> World Bank Group, <https://data.worldbank.org/indicator/EN.ATM.CO2E.KT?end=2020&skipRedirection=true&start=1990&view=chart&year=1990>, (20.07.2024)

1991<sup>8</sup>. The Convention aimed to “stabilize GHG concentrations in the atmosphere” while ensuring sustainable economic development (Article 2)<sup>9</sup>. It puts forward the principle of “*common but differentiated responsibilities and respective capabilities*” for equity among developing and developed countries for the burdens of the Convention (Article 3) and asks parties to periodically report “their national emissions and removals of GHG to the Conference of the Parties (COP)” (Article 4)<sup>10</sup>.

Parties are classified with respect to their burdens and responsibilities under the Convention, according to their development levels and historical responsibilities for GHG emissions. Annex I countries are obliged to “limit GHG emissions, enhance GHG sinks and report about their measures” (Article 4/2)<sup>11</sup>. Besides their responsibilities as Annex I countries, Annex II countries are asked to provide financial and technological support for the developing countries (Article 4/3)<sup>12</sup>. Non-annex countries are just “encouraged to reduce GHG emissions”<sup>13</sup>. The Convention keeps serving as the framework for the succeeding climate documents, however, doesn’t foresee any sanctions for its parties.

*Kyoto Protocol* (KP) to UNFCCC was adopted in 1997 and provided the operationalization of UNFCCC until 2020. Before the KP, CO<sub>2</sub> emissions (kt) was detected to increase to 22,778,983 in 1996<sup>14</sup>. Increase in global average temperature was measured 0.61 Celsius in 1997<sup>15</sup>. KP asked industrialized countries, countries in transition and the EU to reduce GHG emissions by 5% for the period 2008-2012 compared to 1990 levels. With Doha Amendment to

<sup>8</sup> Copernicus EU, <https://climate.copernicus.eu/climate-indicators/temperature> (20.07.2024).

<sup>9</sup> United Nations, United Nations Framework Convention On Climate Change, 1992. Available at: <https://unfccc.int/resource/docs/convkp/conveng.pdf> (28.11.2023)

<sup>10</sup> *ibid*

<sup>11</sup> *ibid*

<sup>12</sup> United Nations, United Nations Framework Convention On Climate Change, 1992. <https://unfccc.int/resource/docs/convkp/conveng.pdf> (28.11.2023)

<sup>13</sup> United Nations, Climate Change, What is the United Nations Framework Convention on Climate Change?, <https://unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change> (19.02.2024)

<sup>14</sup> World Bank, <https://data.worldbank.org/indicator/EN.ATM.CO2E.KT?end=2020&skipRedirection=true&start=1990&view=chart&year=1990>, (20.07.2024)

<sup>15</sup> Copernicus EU, <https://climate.copernicus.eu/climate-indicators/temperature> (20.07.2024).

KP in 2012, parties were asked to reduce GHG emissions by at least 18% below 1990 levels for the 2013-2020 period<sup>16</sup>. It introduced flexible market-based trade of emissions, aiming the removal of emissions from the atmosphere regardless of their exact place. Parties were asked to submit annual emission inventories<sup>17</sup>.

Being the latest international treaty on climate change, *Paris Agreement* (PA) was adopted in 2015. It sets operationalization of the UNFCCC and designs climate strategies of parties for the post 2020 period. Before the signature of PA, in 2014, CO<sub>2</sub> emissions (kt) was detected to increase to 34,261,370 and increase in global average temperature was measured 0.94 Celsius<sup>18</sup><sup>19</sup>. PA aims to “limit the temperature increase to 1.5°C above pre-industrial levels” to “reduce the risks and impacts of climate change”<sup>20</sup>. It declares adherence to principles of the UNFCCC like sustainable development, equity, common but differentiated responsibilities.

PA is a “legally binding international treaty on climate change” whose parties are “obliged to submit Nationally Determined Contributions (NDCs)” declaring commitments and planned actions for reducing GHG emissions every five years<sup>21</sup>. To control implementation of the NDCs, PA declared the onset of Enhanced Transparency Framework (ETF) by 2024, which is expected to achieve NDCs on a voluntary basis which shall be supervised by technical experts and COP (Article 6)<sup>22</sup>.

PA is considered a milestone in climate change adaptation not only by the ambitious target it sets for the average rise in global temperature but also

<sup>16</sup> United Nations, Climate Change, What is the Kyoto Protocol? [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol) (19.02.2024); Nuran Talu and Habip Kocaman, Türkiye’de İklim Değişikliği ile Mücadelede Politikalar, Yasal ve Kurumsal Yapı, İklim Değişikliği Eğitim Modülleri Serisi 4, Ankara: T.C. Çevre ve Şehircilik Bakanlığı Çevre Yönetimi Genel Müdürlüğü, (2019).

<sup>17</sup> ibid

<sup>18</sup> World Bank, <https://data.worldbank.org/indicator/EN.ATM.CO2E.KT?end=2020&skipRedirection=true&start=1990&view=chart&year=1990>, (20.07.2024)

<sup>19</sup> Copernicus EU, <https://climate.copernicus.eu/climate-indicators/temperature> (20.07.2024).

<sup>20</sup> United Nations, Paris Agreement, 2015. Available at: [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf) (20.02.2024).

<sup>21</sup> United Nations, Climate Change, The Paris Agreement- What is the Paris Agreement?, <https://unfccc.int/process-and-meetings/the-paris-agreement> (20.02.2024)

<sup>22</sup> United Nations, Paris Agreement, 2015. Available at: [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf) (20.02.2024).

by the global cooperation it foresees among parties to achieve that. It is “for the first time, a binding agreement brings nations together to combat climate change and adapt to its effects”<sup>23</sup>. Upon PA mandates, parties make serious mitigation commitments and abide themselves. Therefore, PA symbolizes a turning point where climate change is globally accepted as a serious “common” problem for the humankind against which sound collective action is indispensable. PA categorizes parties as developed and developing countries, however, doesn’t totally abandon the Annex system of UNFCCC. PA underlines providing developing/underdeveloped countries with financial, technical, and capacity building support <sup>24</sup>.

After the PA, it was emphasized to “limit global warming to 1.5°C, having peak in GHG emissions before 2025 and 43% decline by 2030”<sup>25</sup>. Parties have been submitting NDCs since 2020, however, no control mechanism is set to make them binding documents, where adoption of ETF might help. PA is considered to open a new path as an on-going process in terms of climate change adaptation where rules and progress are determined gradually in due course. This is so both on collective basis (e.g., COP decisions) and on national basis (e.g., changes made in climate, energy, and various other policies).

Adopted in 2018, *Paris Rulebook* elaborated on the operationalization of PA, such as, preparing NDCs and international emission trades, issuing common reporting tables, declaration of NDCs in 2025 for the period 2030-2035 and in 2030 for the period 2035-2040<sup>26</sup>

### **A. European Green Deal (EGD) as a Catalyst for Climate Change Adaptation Processes**

Issued by the EU in 2019, EGD has the target of having climate neutral economy by 2050. It aims to reduce GHG emissions by 55% compared to 1990 levels by 2030<sup>27</sup>. These all refer to achieving sustainable development

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<sup>23</sup> *ibid*

<sup>24</sup> *ibid*

<sup>25</sup> *ibid*

<sup>26</sup> Gauthier Van Thuyne, *The Paris Rulebook after COP26*, 2021. Available at: <https://www.allenoverly.com/en-gb/global/blogs/countdown-to-cop/the-paris-rulebook-after-cop26> (22.02.2024).

<sup>27</sup> European Commission, *The European Green Deal*, 2019. [https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC\\_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1&format=PDF) (10.02.2024)



and green transformation in economy and policymaking. In this regard, the EU issued European Climate Law in 2021.

EU declared that rules/standards set for green transformation in economy would apply to countries with which it would be trading. Starting from 2026, with the Carbon Border Adjustment Mechanism (CBAM), EU will “put a fair price on the carbon emitted during production of carbon intensive goods that are entering the EU”<sup>28</sup>.

Therefore, EU should be carefully analyzed as the prominent catalyst of the climate change adaptation processes also in non-EU countries due to EGD which perpetuates the goals of PA and imposes serious mandates not only for its members but also for any parties willing to trade, with closer deadlines than the PA. This inevitably implies for (rather rapid) changes in the administrative and legislative set-ups of the countries involved and possibly paving the way for more hybrid structures in both regards.

## **II. Theoretical/Conceptual Framework**

Since the main cause of climate change is detected to be the increase in global temperature and the level of GHGs in the atmosphere due to centuries-long development and industrialization-oriented anthropogenic activities, the clash between development/economic concerns and climate/environment concerns has long been the very central issue for climate change adaptation processes. In fact, it is the choice of prioritizing one or the other that determines how the processes evolve. Till now it has been largely the economy/development concern which has been determining/dominating the climate change adaptation processes. The idea of sustainable development has always been referred to in any attempt since UNFCCC, including PA and EGD, where the aim is to minimize emissions while also ensuring sustainable development. With the adoption of climate laws, it might seem that climate concerns started to take precedence over economic/development concerns. However, it's evident that what motivates states to make these laws is mostly economic concerns, as they don't want to lose their competitiveness in global trade and adapting themselves to the mandates of EGD. Economic/development concerns and climate concerns are highly embedded and the degree of inclination to take stand towards one or the other will

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<sup>28</sup> European Commission, Carbon Border Adjustment Mechanism, 2024. [https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\\_en](https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en) (22.02.2024)

determine the path that climate change adaptation will follow both at the global and national levels.

Here, it would be appropriate to specify the level and unit of analysis of the research, which analyzes the change in administrative and legal set-ups during climate change adaptation, by mainly focusing on the attempts made at international/supranational and national levels and the interaction between them. In this context, related/leading organizations and public institutions involved at the international/supranational and national levels and related soft law and hard law documents issued at these levels are the focus of analysis. The research doesn't attempt to analyze regional/local extensions of climate change adaptation processes.

Clash between developing/underdeveloped and developed countries in carrying the burden of past uneven development processes is another debate that is highly cited in climate change adaptation. It has been reflected on the dispute whether Türkiye should be categorized as developing or developed country (as Annex I or Annex II country) regarding its obligations/commitments in climate change adaptation. Developing countries argue that they don't have the same historical responsibility for climate change as industrialized countries and pursue fair position within global cooperation for climate change and in getting technical/financial support in this context. Although principle of common but differentiated responsibilities emphasizes caring for equity among developing and developed countries with respect to their burdens/responsibilities this keeps being a hot issue in climate change adaptation practices and further added by issues like climate justice, effects of climate change on disadvantaged groups, gender-biased effects of climate change, climate change-induced poverty and migration, all calling for further reorganizations in administrative and legal set-ups.

Analyzing climate change adaptation from political and administrative perspectives requires understanding the change in globalization process as climate change is highly challenging globalization. On the one hand it requires global cooperation to eliminate/minimize the adverse effects of climate change, on the other hand it challenges the competitive characteristics of industrial production and trade taking place on global scale. In the face of detrimental impacts of climate change, there has been greater emphasis on shifting from purely development-oriented policies to ecosystem-oriented

policies.<sup>29</sup> Emphasis on the necessity to harmonize development goals with the ecosystem, has led to “questioning of the usual globalization process” and paved the way for the emergence of the concepts “*new/green globalization*” and “*Green New Deal (GND)*”<sup>30</sup>.

While this might be considered to imply a new social contract where people agree on not to harm the ecosystem within a GND<sup>31</sup>, it’s also considered as a necessary attempt required for the reproduction and continuation of the capitalist system<sup>32</sup> to overcome the crisis. Inspired by the New Deal of Roosevelt, in the face of climate crisis<sup>33</sup>, *global GND* was introduced in UNEP 2008 Annual Report “as a response to 2008 global crisis, to combat climate change and address the many interlinked environment and development challenges of the 21st century”<sup>34</sup>. GND seeks to achieve economic recovery by funding green sectors<sup>35</sup>. Resembling the New Deal of 1930s, GND asks for “steering economic stimulus investments in an environmentally and financially sustainable direction” in the face of climate challenges<sup>36</sup>. Calling public authorities to act against climate change by the concepts like *GND* and green leadership may certainly have the motivation to cope with the accompanying problems/crisis in global economy, as has been

<sup>29</sup> United Nations, United Nations Decade on Ecosystem Restoration 2021-2030, 2021. Available at: <https://www.decadeonrestoration.org/about-un-decade> (20.02.2024)

<sup>30</sup> Ruşen Keles, Yusuf Erbay and Kemal Görmez. *Yeşil Yeni Düzen*, (Önsöz), Ankara: İmge Kitabevi, 2023.

<sup>31</sup> Yusuf Erbay, “Yeşil Yeni Düzen ve Yeşil Liderlik” in *Yeşil Yeni Düzen*, Ankara: İmge Kitabevi, (2023): 95-164.

<sup>32</sup> Corinne Lepage, “Başka Türlü Yaşamak”, İmge Kitabevi, Ankara, quoted in Erbay, Yusuf. “Yeşil Yeni Düzen ve Yeşil Liderlik” in *Yeşil Yeni Düzen*, Ankara: İmge Kitabevi, (2023): 95-164.

<sup>33</sup> ibid

<sup>34</sup> UNEP, UNEP 2008 Annual Report, 2009. Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/7742/-UNEP%202008%20Annual%20Report-2009837.pdf?sequence=3&isAllowed=y> (23.02.2024)

<sup>35</sup> Edward B. Barbier, A Global Green New Deal Executive Summary, Report prepared for the Green Economy Initiative and the Division of Technology, Industry and Economics of the UN Environment Programme, 2009. Available at: [http://www.edwardbbarbier.com/Publications/a\\_global\\_green\\_new\\_deal-executive\\_summary.pdf](http://www.edwardbbarbier.com/Publications/a_global_green_new_deal-executive_summary.pdf) (27.05.2024)

<sup>36</sup> UNEP, UNEP 2008 Annual Report, 2009. Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/7742/-UNEP%202008%20Annual%20Report-2009837.pdf?sequence=3&isAllowed=y> (23.02.2024)

the case in 2008 crisis. Therefore, keeping in mind the close relationship between the challenges/crisis in global economy and those in climate/environment, both of which may require more public intervention, could save one from falling into the trap of a different form of “green washing” when analyzing the newly “green” concepts such as GND.

Climate change adaptation requires the contribution and participation of various stakeholders at various levels, from global to sub-national, therefore the concepts *governance* and particularly *multilevel governance (MLG)* are highly referred to<sup>37</sup>. Although it was originally devised to explain the relations within the EU, in time MLG has become a concept used for any multi-level structured relationship, including climate change adaptation.

After its introduction by the UN “as a new model to achieve a broad global mobilization of different actors in sustainable development” MLG has been frequently referred to in describing climate change adaptation processes<sup>38</sup>. PA emphasizes global MLG by underlining the “engagement of all levels of government and various actors in addressing climate change” in its preamble<sup>39</sup>. Requiring all parties to submit NDCs, “provided a shift from a top-down approach to a more bottom-up one”<sup>40</sup> where PA underlines the multi-level characteristic of climate governance. As Dubash explains, with the PA, “climate politics has become at least as much about understanding dynamics *within* nations as it is understanding the interaction *between* nations”<sup>41</sup>. Principle of common but differentiated responsibilities also points to a MLG model where the common problem of climate change will be

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<sup>37</sup> Monica Di Gregorio, Leandra Fatorelli, Jouni Paavola, Bruno Locatelli, Emilia Pramova, Dodik Ridho Nurrochmatd, Peter H. Maye, Maria Brockhausf, Intan Maya Sarib, Sonya Dyah Kusumadewia. “Multi-level governance and power in climate change policy networks”, *Global Environmental Change*, 54 (2019): 64-77.; Deborah Heinen, Alessandro Arlati and Jörg Knieling. “Five dimensions of climate governance: a framework for empirical research based on polycentric and multi-level governance perspectives”, *Environmental Policy and Governance*, 32(1) (2022): 56–68. <https://doi.org/10.1002/eet.1963>.

<sup>38</sup> Martin Jänicke, “The Multi-level System of Global Climate Governance – the Model and its Current State”, *Environmental Policy and Governance*, 27, (2017): 108–121. DOI: 10.1002/eet.1747.

<sup>39</sup> United Nations, Paris Agreement, 2015. Available at: [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf) (20.02.2024).

<sup>40</sup> Savasan, 2019

<sup>41</sup> Navroz K. Dubash, “Varieties of climate governance: the emergence and functioning of climate institutions”, *Environmental Politics*, vol. 30, no. s1, (2021): 1–25, <https://doi.org/10.1080/09644016.2021.1979775>.

attempted by participation/action at any relevant level. It is argued that MLG model “has advantage over the slow progress of international climate negotiations” and “it addresses not only all scales but also all relevant interest groups in global climate governance”<sup>42</sup>. With the “trend” of adding a “green” prefix to the concepts widely used for explaining climate change adaptation, “new green governance” has become a familiar concept recently<sup>43</sup>.

As a response to the question of “how to govern the governance” in GND, “*Green Leadership*” was put forward, implying recourse to public authorities to take the lead in the governance of stakeholders in climate change adaptation. Green leaders to “govern the governance” are expected to adopt a green attitude in their strategies and be capable of adapting new technologies to achieve sustainability and green justice<sup>44</sup>. Moreover, it is argued that “akin to the welfare state, a ‘decarbonizing state’ is in the making” in the face of “emergence of climate laws, climate science bodies and new executive agencies worldwide”<sup>45</sup>.

Soft law has long been in use in climate change adaptation processes. UNFCCC and PA are usually discussed in terms of their soft law and hard law characteristics. In fact, hard law and soft law are highly interwoven in climate documents that “hard and soft law should be seen as a part of a continuum of international legal mechanisms”<sup>46</sup>. “Being legally binding” is the widely accepted criteria for differentiating hard law from soft law. However, for international climate documents, this is considered an insufficient base for distinction. According to some authors, to be able to make a sound distinction, one should look at the content of legal obligations. Lacking enforcement is considered as a strong sign of “softness”<sup>47</sup>. Baxter underlines the issues of clarity and enforcement in differentiating soft law from hard law and defines soft law as “provisions/clauses with vague obligations or weak commands,

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<sup>42</sup> Jänicke, 2017

<sup>43</sup> Erbay, 2023

<sup>44</sup> ibid

<sup>45</sup> Johnathan Guy, Esther Shears and Jonas Meckling. “National models of climate governance among major emitters”, *Nature Climate Change*, 13(2): January (2023): 1-7. DOI:10.1038/s41558-022-01589-x.

<sup>46</sup> Johanna Alkan-Olsson, “What role for soft law in building and developing the climate change regime?”, *Yeditepe Üniversitesi Hukuk Fakültesi Dergisi*, Cilt: VIII, Sayı:1 (2011): 1-36.

<sup>47</sup> Fabien Terpan, “The Definition of Soft Law” in *Research Handbook of Soft Law*, eds. by Mariolina Eliantonio, Emilia Korkea-aho and Ulrika Mörth, Cheltenham: Edward Elgar Publishing, (2023): 43-55.

which are formally binding but lack the required normative content to create *enforceable* rights and obligations”<sup>48</sup>.

Distinguishing soft law from hard law based on enforcement capabilities seems to be more useful in the case of international climate documents which are usually discussed with respect to their implementation and control mechanisms. Although PA is presented as a legally binding document together with its compulsory NDC mechanisms and its attempts for establishing EFT, regarding enforcement capacity of these mechanisms and that of the provisions of the agreement in general, PA exhibits soft law characteristics. Thus, it would be best defined as an international agreement originated on soft law basis but attempting for some hard law mechanisms, whose enforcement capabilities are not yet clearly established.

Therefore, it can be said that climate change adaptation processes are still predominantly carried out by soft law documents. This is mainly due factors such that this enables parties to avoid precise obligations, to take care of their divergent interests, to behave in a flexible manner, to have time for learning/adaptation to scientific developments and uncertainties and to maintain competitiveness<sup>49</sup>. Besides these features, soft law doesn't have enforcement and sanctioning capacity to provide compliance with its provisions. Nevertheless, it is also this characteristic which makes it a handy tool for the climate change adaptation processes.

It seems that soft law and governance are emerging as complementary concepts in climate change adaptation. As Harlow puts it, “growing use of soft law and recourse to ‘soft’ techniques of governance” are emerging as the accepted “standards of ‘good governance’ and ‘principles of good administration’”<sup>50</sup>. However, it is also argued that, for a country to achieve its mitigation targets, it's necessary to have clear legal norms together with supportive administrative mechanisms which are usually attained by enacting climate laws<sup>51</sup>. With the adoption of PA and particularly EGD, which are

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<sup>48</sup> R. R. Baxter, “International Law” in “Her Infinite Variety”, 29 International and Comparative Law Quarterly, 1980, quoted in Alkan-Olsson, J. (2011) “What role for soft law in building and developing the climate change regime?”, *Yeditepe Üniversitesi Hukuk Fakültesi Dergisi*, Cilt: VIII, Sayı:1. (1980): 1-36.

<sup>49</sup> Johanna Alkan-Olsson, 2011.

<sup>50</sup> Carol Harlow, “Law and Public Administration: Convergence and Symbiosis”, *International Review of Administrative Sciences*, vol. 71(2), (2005): 279-294. DOI: 10.1177/0020852305053886.

<sup>51</sup> Kamile Türkoğlu Üstün, “Yeni Bir Dönemin Başlangıcı: Avrupa Yeşil Mutabakatı ve Türk Çevre Hukuku ve Politikalarına Etkileri”, *Memleket Siyaset Yönetim (MSY)*, Cilt 16, Sayı 36, Aralık 2021, 329-366.

regarded as soft law documents, various states and the EU have enacted climate laws to implement the commands of these documents. This shows the injection of hard law into soft law led climate change adaptation processes in these countries, which in the end points to hybrid models cohabiting soft and hard law regulations.

The case of France can be cited as an example cohabiting soft and hard law in climate change adaptation. Energy and Climate Law (2019) and Climate and Resilience Law (2021) are hard law documents of France having binding provisions on various sectors, such as making it obligatory for car manufacturers to include CO<sub>2</sub> emissions of their products in their advertisements, abolishing national flights to destinations which are in reach by a direct train journey of less than 2h30min<sup>52</sup>. Besides these, soft law documents such as National Low Carbon Strategy and Multiannual Energy Program are also in effect to guide climate policy and relevant stakeholders, without binding provisions.

As Hanson points out, PA regime “has gradually developed into a hybrid legal system - including both hard and soft law - to walk the fine line between enforcement, increasing obligations to reduce emissions, and broadening international participation”<sup>53</sup>. As Huan states, it reflects a ‘hybrid’ approach by “blending bottom-up flexibility to promote broad participation with top-down rules to promote accountability and ambition”<sup>54</sup>.

This (PA and EGD induced) hybridity has been reflected on the legislative and administrative set-ups such that in the former hard law has started to accompany soft law regulations and, in the latter, participatory models has started to accompany public institutions which used to lead the processes. Therefore, in this research, “hybrid model” refers to “cohabitation of hard law and soft law” and “cohabitation of top-down (public institutions/ministry-led) and bottom-up (more participatory) governance models” in climate change adaptation processes. Thus, “emerging hybrid model” refers to the “attempts” to inject hard law regulations (having

<sup>52</sup> Oğuz Sancakdar, “İklim Değişikliğinin Kamu Hizmeti, Sürdürülebilir Kalkınma ve Temel Haklara Etkilerinden Kesitler ve İklim Davaları”, *İdare Hukuku ve İlimleri Dergisi*, (2023) 22: 99-129. <https://doi.org/10.26650/ihid.22.005>

<sup>53</sup> Carter A. Hanson, “Hard and Soft Law in the Paris Climate Agreement”, Student Publications. 925, (2021): 1-15. Available at: [https://cupola.gettysburg.edu/student\\_scholarship/925](https://cupola.gettysburg.edu/student_scholarship/925).

<sup>54</sup> Jennifer Huang, “A Brief Guide To The Paris Agreement And ‘Rulebook’ ”, The Center for Climate and Energy Solutions, 2019. Available at: <https://www.c2es.org/wp-content/uploads/2019/06/paris-agreement-and-rulebook-guide.pdf> (12.02.2024)

enforcement capabilities) to soft law regulations and the “attempts” to inject bottom-up (participatory) models to the existing top-down, public institution-led models.

In general hybrid models emerge and are preferred in times of transition as they provide easier and flexible processes for transition. Therefore, they can be considered both as the outcomes and catalysts of these processes<sup>55</sup>. In the case of climate change adaptation, having hybrid models has a similar reasoning that they make the reconciliation of PA commitments with national development goals easier and thus provide a rather flexible and smooth transition.

Finally, *muddling through approach* and *incrementalism*<sup>56</sup> provide useful frameworks for understanding climate change adaptation and the role of soft law and public institutions in this process. Reflections of incrementalistic and muddling through approach can be detected when one observes the emphasis on and injection of more participatory models in the conduct of climate change policies in one period and later stepping back and not making this previously introduced model institutionalized (such as the Climate Council practice in Türkiye). It can also be observed in cases where having hard law is highly emphasized as the best option to implement the commands of climate change adaptation, but no concrete steps have been taken in this regard and/or no significant enforcement mechanisms are foreseen for cases of disobedience and thus having soft law as the main form of regulation. Muddling through/incrementalistic approach adds to the hybridity of climate change adaptation process and known to be preferred in times of reconciliation between different concerns - such as the development concerns and climate concerns- as they provide rather easier and flexible transition.

### III. Role of Public Institutions in Climate Change Adaptation in Türkiye

Public institutions have leading role in climate change adaptation in Türkiye. Particularly, the now called Ministry of Environment, Urbanization and Climate Change (MEUCC) has the leading position since the very beginning. This can be traced by following the changes it has been undergoing in its organizational set-up, duties/responsibilities and even in its title throughout the process. These changes have become more significant after the

<sup>55</sup> Bengi Demirci, “Sağlık Hizmetlerinde Dönüşüm: Sağlıkta Dönüşüm Programı (SDP) Nasıl Bir Sistem Getiriyor?”, *Akdeniz İ.İ.B.F. Dergisi* (30) (2015): 122-135.

<sup>56</sup> Charles E. Lindblom, (1959) “The Science of “Muddling Through”, *Public Administration Review*, Vol. 19, No. 2, Spring (1959): 79-88.



ratification of PA. The wording “climate change” was added to the name of the ministry right after the ratification, and it was changed from the Ministry of Environment and Urbanization to the Ministry of Environment, Urbanization and Climate Change (MEUCC)<sup>57</sup>. Simultaneously, Directorate of Climate Change (DCC) was established as an affiliated institution of the MEUCC. DCC is “in charge of carrying out all kinds of work necessary for adaptation, mitigation and raising awareness about climate change” and “it is responsible for determining policies, strategies, and actions at the national and international level, conducting negotiation processes, and ensuring coordination with institutions/organizations within the scope of mitigation and adaptation”<sup>58</sup>. These clearly explain the central/leading role of the MEUCC (DCC) in all aspects of climate change adaptation whose official website declares the MEUCC as “the national focal point for climate change” to “carry out the task of national coordination on issues related to climate change”<sup>59</sup>. Moreover, the Deputy Minister has been acting as the Climate Change Chief Negotiator, adding more to the central position of the MEUCC in climate change adaptation.

Additionally, there is the Climate Change Adaptation and Coordination Board, charged with determination, supervision and review of the plans, policies, strategies, and actions about climate change. It meets at least twice a year upon the call of the minister of MEUCC and is composed of members from different institutional/technical backgrounds<sup>60</sup>.

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<sup>57</sup> Presidential Decree, no. 85, 29.10.2021, Cumhurbaşkanlığı Kararnamesi no.85, 2021, <https://www.resmigazete.gov.tr/eskiler/2021/10/20211029.pdf> (25.02.2024)

<sup>58</sup> DCC, Directorate of Climate Change – About Us, 2021. <https://iklim.gov.tr/en/about-us-i-75>, (23.02.2024).

<sup>59</sup> CCCC, Climate Change Coordinating Committee, 2021. <https://iklim.gov.tr/en/coordination-commity-of-climate-change-adaptation-i-76> (25.02.2024)

<sup>60</sup> Coordination Board: under the chairmanship of the Minister, Chief Climate Change Negotiator, Ministry of Foreign Affairs, Ministry of Energy and Natural Resources, Ministry of Treasury and Finance, Ministry of Interior, Ministry of National Education, Ministry of Health, Ministry of Industry and Technology, Ministry of Agriculture and Forestry, Ministry of Trade, Deputy Ministers of Ministry of Transport and Infrastructure, Head of Strategy and Budget, Head of Higher Education Council, Head of Climate Change, President of Scientific and Technological Research Council of Türkiye, President of Turkish Environment Agency, President of Turkish Statistical Institute, President of Union of Chambers and Commodity Exchanges of Türkiye, Turkish Industrialists and Businessmen's Association, The Independent Industrialists' and Businessmen's Association, consists of twenty-two members, including the President of the Union of

Guy et al defined Türkiye's climate governance as "a carbon centralist model having high levels of horizontal and vertical centralization where climate policy is delegated primarily to a development ministry"<sup>61</sup>.

After the ratification of PA, an attempt was made to provide participation of related stakeholders from different backgrounds such as universities, NGOs, professional organizations, local governments, private sector, industry, public organizations, etc. in determining the country's climate change adaptation strategies. In this regard, Climate Council met on 21-25 February 2022, where different commissions constituted by the stakeholders according to their backgrounds, contributed to the final declaration on the climate change strategy of Türkiye by their recommendations all advisory in nature<sup>62</sup>. Besides the concerns on the inclusivity and accessibility of the Climate Council for all the relevant stakeholders and on the content of the decisions declared, the leading position of the MEUCC was uncontested and observed from the initial phase of the organization till the end of it, which pointed to a hybrid model where the leadership role was given to the public institution to "govern the governance".

MoT has started to take active role in complying with the mandates of the EGD where the EU introduced CBAM and ETS for its imports. In 2021, Green Deal Action Plan (GDAP) of Türkiye was issued for complying with the EGD and charged MoT with the coordination and secretariat of the GDAP. Green Deal Working Group (GDWG)<sup>63</sup> was formed to help determine the

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Municipalities of Türkiye. <https://iklim.gov.tr/en/coordination-commity-of-climate-change-adaptation-i-76> (25.02.2024)

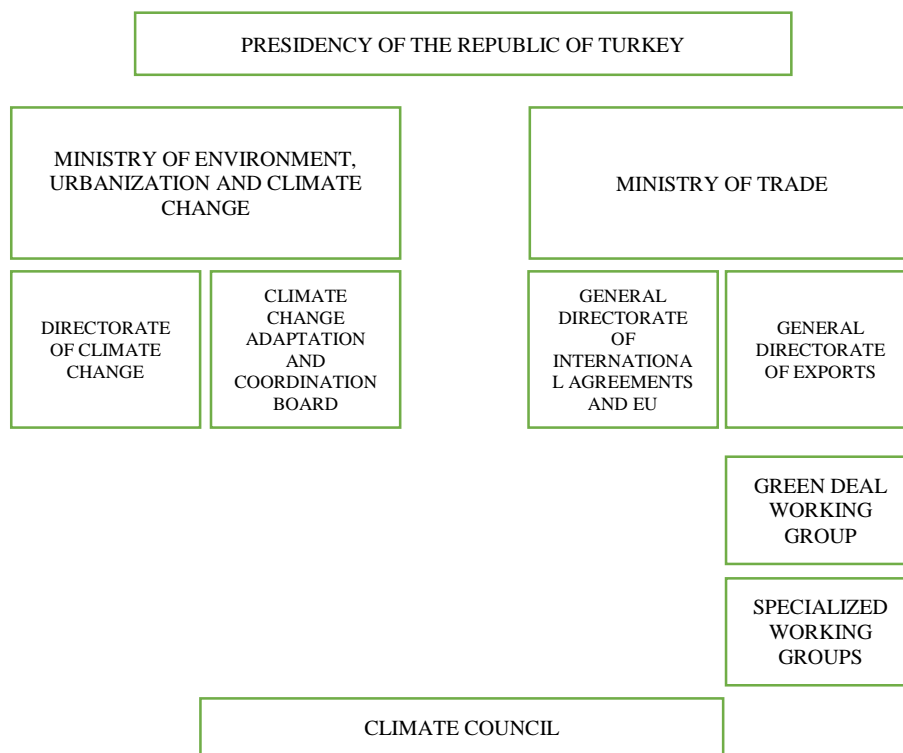
<sup>61</sup> Johnathan Guy, Esther Shears and Jonas Meckling. "National models of climate governance among major emitters", *Nature Climate Change*, 13(2): January (2023): 1-7. DOI:10.1038/s41558-022-01589-x.

<sup>62</sup> MEUCC, TC Çevre Şehircilik ve İklim Değişikliği Bakanlığı, İklim Şurası'nda Alınan Önemli Kararlar, 2022. <https://agri.csb.gov.tr/iklim-surasi-nda-alinan-onemli-kararlar-haber-272193> (28.02.2024)

<sup>63</sup> Green Deal Working Group: Presidency of the Digital Transformation Office of the Presidency of the Republic of Türkiye, Presidency of the Finance Office of the Presidency of the Republic of Türkiye, Presidency of the Strategy and Budget of the Presidency of the Republic of Türkiye, Ministry of Labour and Social Security, MEUCC, Presidency of the EU of the Ministry of Foreign Affairs, Ministry of Energy and Natural Resources, Ministry of Treasury and Finance, Presidency of Disaster and Emergency Administration of the Ministry of Internal Affairs, Ministry of National Education, Ministry of Industry and Technology, Ministry of Agriculture and Forestry, Ministry of Trade, Ministry of Transportation and Infrastructure.; Advisory Council: Union of Chambers and Stock Exchanges of Türkiye, Assembly of Exporters of Türkiye, Foreign Economic Relations Board,

carbon pricing system for the country with the “participation of representatives from the public and private sectors and NGOs, which constituted various Specialized Working Groups (SWG) formed on technical backgrounds”<sup>64</sup>. Being a trade partner with the EU, Türkiye has been making steps to adapt to the mandates of the EGD via MoT, which has been emerging as another public institution taking on the lead in the climate change adaptation processes besides the MEUCC.

**Figure 1:** Leading Institutions in Climate Change Adaptation Processes in Türkiye



Turkish Industry and Business Association, Independent Industrialists and Businessmen’s Association, Turkish Confederation of Employer Associations, Turkish Contractors Association, International Investors’ Association, High Board of Organized Industrial Zones. <https://ticaret.gov.tr/dis-iliskiler/yesil-mutabakat/yesil-mutabakat-eylem-plani-ve-calisma-grubu/ymcg-uyesi-kurum-ve-kuruluslar> (Republic of Türkiye, MoT) (22.07.2024).

<sup>64</sup> MoT, Green Action Plan, 21.07.2022. <https://www.trade.gov.tr/exports/green-action-plan> (25.02.2024).

As Figure 1 illustrates, there seems to be a division of labour between the two leading ministries regarding climate change adaptation processes of Türkiye. MEUCC is charged with the general conduct of climate change adaptation and mitigation at the national and international level, which in fact makes this ministry deal with any climate related issue such as conducting negotiation processes, determining general policies, raising awareness, or ensuring coordination among different institutions when necessary. MoT on the other hand is basically charged with adaptation to EGD and implementing GDAP. Besides joining GDWG meetings, the two ministries act as the coordinators of different SWGs which are designed to help GDWG<sup>65</sup>.

#### IV. Role of Soft Law in Climate Change Adaptation in Türkiye

Being a country located in the Mediterranean basin where global warming has been severely felt, Türkiye has been involved in the international attempts made to adapt to climate change. Türkiye attended the Rio Conference in 1992. At the beginning, mostly due to its OECD membership, Türkiye was listed in both Annex I and Annex II, to which it objected on the grounds that it didn't have same historical responsibility for climate change as the industrialized countries<sup>66</sup>. In 2002, Türkiye was removed from Annex II and became only an Annex I country, and in 2004 it ratified the UNFCCC. Request of Türkiye for getting a fair position within the Convention is on the agenda for so long although it has been decided in various COP decisions that while being an Annex I country, there are special circumstances for Türkiye in terms of historical responsibility, economic and technological development levels, human development index and the like - which are to be considered in providing/getting financial, technological and capacity-building support for the implementation of the Convention<sup>67</sup>.

Türkiye became a party to the KP in 2009 and to Doha Amendments in 2017, however, it doesn't have any quantified commitments to reduce GHG emissions under the KP<sup>68</sup>. Due to its responsibilities under the UNFCCC, Türkiye made commitments before the ratification of the PA. In 2015 NDC,

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<sup>65</sup> <https://ticaret.gov.tr/dis-iliskiler/yesil-mutabakat/yesil-mutabakat-eylem-planive-calisma-grubu/ihtisas-calisma-gruplari>

<sup>66</sup> Talu and Kocaman, 2019.

<sup>67</sup> MoFA, Ministry of Foreign Affairs, 2022. Available at: [https://www.mfa.gov.tr/united-nations-framework-convention-on-climate-change-\\_unfccc\\_-and-the-kyoto-protocol.en.mfa](https://www.mfa.gov.tr/united-nations-framework-convention-on-climate-change-_unfccc_-and-the-kyoto-protocol.en.mfa) (29.11.2023)

<sup>68</sup> Talu and Kocaman, 2019.

it declared 21% reduction in GHG emissions by 2030, submitted the 7<sup>th</sup> NDC in 2018 and Fourth Biennial Report in 2020<sup>69</sup>.

Türkiye signed the PA in 2016 and ratified it in 2021, with an attached declaration stating that it would implement the PA and its mechanisms as a developing country, in line with the NDCs, without prejudice to its right to economic and social development<sup>70</sup>. After the ratification of the PA, Türkiye committed to achieve net zero emissions by 2053 and submitted updated NDC in 2022<sup>71</sup>.

To comply with these commitments made at the international level, Türkiye has been taking various steps at home, which essentially involve efforts to reconcile its climate commitments with development goals. In the *National Climate Change Strategy*, Türkiye declared that it would “fully integrate climate policies with its development policies”<sup>72</sup>. In the *Development Plans* of the country, climate change adaptation, sustainable development and green transformation have been highly emphasized. Main objectives of the last (12th) Development Plan, which has been projected for 2024-2028 period, have been stated as “transition to low carbon economy, protection of environment and natural resources and increasing social awareness towards environment” (Article 864)<sup>73</sup>. The plan stated that within the context of GDAP, roadmaps of relevant sectors would be updated, control and

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<sup>69</sup> MoFA, Ministry of Foreign Affairs, 2022. Available at: [https://www.mfa.gov.tr/united-nations-framework-convention-on-climate-change-\\_unfccc\\_-and-the-kyoto-protocol.en.mfa](https://www.mfa.gov.tr/united-nations-framework-convention-on-climate-change-_unfccc_-and-the-kyoto-protocol.en.mfa) (29.11.2023)

<sup>70</sup> Official Gazette, 7.10.2021-No.31621 (Resmi Gazete, Sayı : 31621 (Mükerrer) 7 Ekim 2021) <https://www.resmigazete.gov.tr/eskiler/2021/10/20211007M1-1.pdf> (02.07.2022)

<sup>71</sup> World Bank, Country Climate and Development Report: Türkiye, June 2022, Available at: <https://openknowledge.worldbank.org/bitstream/handle/10986/37521/Türkiye%20CCDR%20Full%20Report.pdf?sequence=1&isAllowed=y> (14.06.2023)

<sup>72</sup> MEU, Ministry of Environment and Urbanization (2018) Seventh National Communication of Türkiye Under The UNFCCC, 2018. Available at: [https://unfccc.int/sites/default/files/resource/14936285\\_Türkiye-NC7-2-Seventh%20National%20Communication%20of%20Türkiye.pdf](https://unfccc.int/sites/default/files/resource/14936285_Türkiye-NC7-2-Seventh%20National%20Communication%20of%20Türkiye.pdf) (22.02.2024)

<sup>73</sup> PSB, Presidency of Strategy and Budget, Presidency of the Republic of Türkiye (2024), 12th Development Plan, 2024. Available at: [https://www.sbb.gov.tr/wp-content/uploads/2023/12/On-Ikinci-Kalkinma-Plani\\_2024-2028\\_11122023.pdf](https://www.sbb.gov.tr/wp-content/uploads/2023/12/On-Ikinci-Kalkinma-Plani_2024-2028_11122023.pdf) (24.02.2024)

supervision mechanisms would be devised, and related legislation would be enacted (Article 865.4)<sup>74</sup>.

Integrating climate commitments into its development plans indicates the intention of Türkiye to reconcile its commitments under the PA with its development goals where soft law and public institutions have emerged as the two fundamental tools for this reconciliation. In Türkiye, until the ratification of PA, climate change adaptation processes have been carried out mainly via documents issued by administrative bodies, particularly by the ministry in charge with environmental/climate issues (namely the MEUCC), rather than by a binding specific law directly concerned with climate change. With a few exceptions of secondary legislation<sup>75</sup>, documents issued by administrative bodies don't provide strict sanctioning mechanisms,<sup>76</sup> which indicates the prevalence of soft law in climate change adaptation. Following Harlow, it can be said that “administrators overwhelmed by procedural requirements fall back on ‘soft law’ techniques”, particularly in cases like Türkiye, where climate change adaptation is mainly led by public authorities<sup>77</sup>.

After the ratification of PA, Türkiye has been in the process of preparing its climate law, which is yet in the draft form and has not been made public yet. Therefore, the legislative set-up for the climate change adaptation process is expected to embody hard law soon and probably gain a more hybrid character. However, as it is discussed above, it will be the content of the law (having binding provisions/sanction mechanisms or not) which will determine its hardness. Regulations that will be made to comply with the mandates of the EGD will also be determining the hardness/softness level of the emerging legislative set-up.

It is expected to have more hard law regulations in cases where climate concerns prevail over development/economic concerns. However, in the case of Türkiye, it's rather economic (trade) concerns that urged climate law preparations, which is expected to provide the adaptation to EGD. Also, as economic/trade concerns prevail, it is seen that public institution-led climate

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<sup>74</sup> *ibid*

<sup>75</sup> By-law on the Monitoring of Greenhouse Gas Emissions (2014), By-law on Fluorinated Greenhouse Gases (2022) issued by Ministry of Environment, Urbanization and Climate Change

<sup>76</sup> Climate Change Action Plan 2011-2023, National Climate Change Adaptation Strategy and Action Plan 2011–2023, Climate Change Strategy 2010- 2023 issued by the Ministry of Environment, Urbanization and Climate Change.

<sup>77</sup> Harlow, 2005.

governance further perpetuates with the inclusion of MoT besides MEUCC, despite the attempts to have bottom-up structures such as the Climate Council. In fact, these attempts to inject hard law regulations into the ongoing soft law-led system and to inject more bottom-up, participatory structures into the public institution-led climate governance are all adding to the “emerging hybridity” of the climate change adaptation in Türkiye. Moreover, change in public awareness about climate change might be expected to bring about pressures towards having more hard law regulations with sanctioning mechanisms and more participatory apparatuses, which again might affect the degree of hybridity in the system.

The research has found out that so far there has been a public institution-led, top-down climate change adaptation in Türkiye, based on soft law regulations. This can be traced by the long-lasting leading role of MEUCC and that of MoT recently and by the soft law documents issued by these ministries so far. However, with the recent attempt of adopting a climate law, which was declared to be enacted shortly, and with the assembly of Climate Council which aimed to bring related stakeholders together to reflect their ideas/suggestions on the climate change adaptation strategy, it “seems” that now it’s possible to detect a trend towards cohabiting soft law with hard law and a ministry-led adaptation process with a multi-actor one. Thus, this trend of “cohabiting” the top-down approach with bottom-up approach points to hybrid structures in organizational and legislative set-ups, which could be read as an “emerging trend towards hybridity”. This emerging hybridity can be considered both as an inevitable result and a handy tool for the transition periods like today when the detrimental effects of climate change must be dealt with while keeping up with the development goals is vital without missing out the interests of relevant stakeholders.

### **Conclusion**

PA has accelerated climate change adaptation processes in the ratifying countries where public institutions and soft law become the leading tools of adaptation which in the end pave the way for hybrid legislative set-ups and governance models. This research analyzed the role of public institutions and soft law in climate change adaptation in Türkiye after the ratification of PA, together with the emerging hybrid models in the administrative and legislative set-ups and climate change governance by following the changes that have been taking place in this regard. Based on the conceptual framework set above, the following issues worth raising in depicting administrative and legislative

course of climate change adaptation which gained pace after the ratification of PA.

Firstly, it is seen that public institutions have been having a leading role in the climate change adaptation processes of Türkiye, where particularly the MEUCC takes the lead from the very beginning and recently the MoT has started to take on various responsibilities. In addition to this historically public institution (ministry)-led adaptation process, there have been several attempts for adopting governance models which seeks for the participation of related stakeholders - where however the leading role of the ministries continue. This trend is compatible with the idea of “green leadership” which foresees green leaders of the GND to “govern the governance” in the face of detrimental impacts of climate change. In integrating climate change and development considerations, the World Bank also advises having “a government-led prioritization and sequencing as an essential step to translate the diagnostic into a country-owned strategy and implementable investment plan”<sup>78</sup>. Following Harlow, it can be argued that “having soft law and soft techniques of governance with a possible convergence of legal and administrative values are becoming standards of good governance and principles of good administration” in climate change adaptation<sup>79</sup>.

Secondly, it is evident that soft law has been an inherent element of climate change adaptation and has a significant role in climate documents issued both at the international/supranational and national levels. Climate adaptation has been carried out based on soft law so far and nearly no sound enforcement mechanisms have been established yet. This has various advantages for the parties, like flexibility, avoiding strict obligations and providing extra time for adaptation. However, states have been attempting to have climate laws, implying the inclusion of hard law in the adaptation processes, which points to the emergence of hybrid models in legislative set-ups. At this point it is important to have a look at the content of the law in question to see whether it contains binding provisions and enforcement mechanisms, which would determine its “hardness”. This is also the case for Türkiye, where soft law tools have been in use for so long and a climate law is known to be on its way.

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<sup>78</sup> World Bank, Climate and Development: An Agenda for Action, 03.11.2022, <https://www.worldbank.org/en/topic/climatechange/publication/climate-and-development-an-agenda-for-action> (14.06.2023)

<sup>79</sup> Harlow, 2005.



Thirdly, hybrid models are becoming the significant emergent elements of climate adaptation process due to the trends of combining soft law and hard law in legislative set-ups and having public authorities to lead the attempted governance models. As Hanson states, after the PA, a hybrid legislative system is developing to embody hard and soft law, as it is necessary to reconcile the commitments for emission reductions and the concerns for participation<sup>80</sup> and according to Huang this is necessary to “reconcile bottom-up flexibility to provide broad participation with top-down rules to provide accountability”<sup>81</sup>.

Fourthly, due to EGD, catalyzing role of the EU in climate change adaptation is a significant issue in the countries having trade engagements with the EU. The necessity to adapt to the mandates of the EGD leads to strengthening the role of public institutions in climate change adaptation processes and to the resulting hybrid set-ups.

Fifthly, it can be argued that hybrid models emerging in the legislative and administrative set-ups provide more flexible and easier paths for the parties of PA in their transition to the envisaged carbon-free system, where they must reconcile PA commitments with national development goals. This calls for the employment of incrementalistic approaches in climate change adaptation.

To conclude, besides these inferences, this research can be considered to have accomplished an important mission if it could draw attention to the critical roles played by public institutions and soft law as the leading tools of climate change adaptation processes particularly in the so called GND era, which has been implying significant roles for these two. Apart from the discussions made above, this research underlines the importance of further interdisciplinary studies of public administration and law on climate change adaptation policies. It would be another fine contribution if it could be inspiring for comparative research on the role of public institutions in climate change adaptation processes in other countries which are party to the PA. One limitation of the research could be that the Climate Law of Türkiye, which was known to be on its way, was not yet enacted before the completion of this research, thus, its probable impacts on the soft law/hard law pendulum of climate change adaptation process could not be elaborated on nor its

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<sup>80</sup> Hanson, 2021.

<sup>81</sup> Huang, 2019.

implications for the administrative structure of the country in this regard and for the climate change governance could be reflected on the discussions.

### **Bibliography**

- Alkan-Olsson, Johanna. “What role for soft law in building and developing the climate change regime?”, *Yeditepe Üniversitesi Hukuk Fakültesi Dergisi*, Cilt: VIII, Sayı:1 (2011): 1-36.
- Aşıcı, Ahmet Atıl and Zeynep Bünül. “Green New Deal: A Green Way out of the Crisis?”, *Environmental Policy and Governance*, 22, (2012): 295–306, DOI: 10.1002/eet.1594.
- Aydın-Dikmen, Bengü. “Global Climate Governance between State and Non-State Actors: Dynamics of Contestation and Re-Legitimation”, *Marmara Üniversitesi Siyasal Bilimler Dergisi*, Cilt 8, Özel Sayı, Aralık 2020, ISSN 2147-6926, (2020): 59–79 • DOI: 10.14782/marmarasbd.763831.
- Barbier, Edward B. A. Global Green New Deal Executive Summary, Report prepared for the Green Economy Initiative and the Division of Technology, Industry and Economics of the UN Environment Programme, 2009. Available at: [http://www.edwardbarbier.com/Publications/a\\_global\\_green\\_new\\_deal-executive\\_summary.pdf](http://www.edwardbarbier.com/Publications/a_global_green_new_deal-executive_summary.pdf) (27.05.2024)
- Baxter, R. R. “International Law” in “Her Infinite Variety”, 29 *International and Comparative Law Quarterly*, 1980, quoted in Alkan-Olsson, J. (2011) “What role for soft law in building and developing the climate change regime?”, *Yeditepe Üniversitesi Hukuk Fakültesi Dergisi*, Cilt: VIII, Sayı:1. (1980): 1-36.
- Butun-Bayindir, G. Duygu. “How do transnational municipal networks affect climate policymaking? A qualitative study in Turkey”, *Journal of Urban Affairs*, 43:8, (2021): 1081-1099.
- By-law on the Monitoring of Greenhouse Gas Emissions, Ministry of Environment and Urbanization, 2014. Available at: <https://iklim.gov.tr/db/english/icerikler/files/SERA%20GAZI%20EMİSYONLARININ%20TAKİBİ%20HAKKINDA%20YÖNETMELİK.pdf> (25.02.2024)
- By-law on Fluorinated Greenhouse Gases, Ministry of Environment, Urbanization and Climate Change, 2022. Available at: [https://iklim.gov.tr/db/english/icerikler/files/FGaz%20Yönetmeliği%20\(31881%20-%2029.06.2022\).pdf](https://iklim.gov.tr/db/english/icerikler/files/FGaz%20Yönetmeliği%20(31881%20-%2029.06.2022).pdf) (25.02.2024)
- CCCC, Climate Change Coordinating Committee, 2021. Available at: <https://iklim.gov.tr/en/coordination-committee-of-climate-change-adaptation-i-76> (25.02.2024)

- Climate Change Action Plan 2011-2023, Ministry of Environment and Urbanization, Available at: [https://webdosya.csb.gov.tr/db/iklim/eduardosya/file/eylem%20planlari/iklim\\_degisikligi\\_eylem\\_plani\\_EN\\_2014.pdf](https://webdosya.csb.gov.tr/db/iklim/eduardosya/file/eylem%20planlari/iklim_degisikligi_eylem_plani_EN_2014.pdf) (25.02.2024)
- Climate Change Strategy 2010- 2023, Ministry of Environment and Urbanization, Available at: [https://webdosya.csb.gov.tr/db/iklim/eduardosya/iklim\\_degisikligi\\_stratejisi\\_EN\(2\).pdf](https://webdosya.csb.gov.tr/db/iklim/eduardosya/iklim_degisikligi_stratejisi_EN(2).pdf) (25.02.2024)
- Copernicus EU, <https://climate.copernicus.eu/climate-indicators/temperature> (20.07.2024).
- DCC, Directorate of Climate Change – About Us, 2021. Available at: <https://iklim.gov.tr/en/about-us-i-75>, (23.02.2024).
- DCC Website, (Directorate of Climate Change, Website), Climate Change Coordinating Committee, Available at: <https://iklim.gov.tr/en/coordination-commity-of-climate-change-adaptation-i-76> (28.02.2024)
- Demirci, Bengi. “Sağlık Hizmetlerinde Dönüşüm: Sağlıkta Dönüşüm Programı (SDP) Nasıl Bir Sistem Getiriyor?”, *Akdeniz İ.İ.B.F. Dergisi* (30) (2015): 122-135.
- Demirci, Mustafa. “Kentsel İklim Değişikliği Yönetişimi”, *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, Sayı: 46, Temmuz-Aralık 2015, (2015): 75-100.
- Di Gregorio, Monica, Leandra Fatorelli, Jouni Paavola, Bruno Locatelli, Emilia Pramova, Dodik Ridho Nurrochmatd, Peter H. Maye, Maria Brockhausf, Intan Maya Sarib, Sonya Dyah Kusumadewia. “Multi-level governance and power in climate chang policy networks”, *Global Environmental Change*, 54 (2019): 64-77.
- Dubash, Navroz K. “Varieties of climate governance: the emergence and functioning of climate institutions”, *Environmental Politics*, vol. 30, no. s1, (2021): 1–25, <https://doi.org/10.1080/09644016.2021.1979775>.
- Erbay, Yusuf. “Yeşil Yeni Düzen ve Yeşil Liderlik” in *Yeşil Yeni Düzen*, Ankara: İmge Kitabevi, (2023): 95-164.
- European Commission, The European Green Deal, 2019. Available at: [https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC\\_1&format=PDF](https://eur-lex.europa.eu/resource.html?uri=cellar:b828d165-1c22-11ea-8c1f-01aa75ed71a1.0002.02/DOC_1&format=PDF) (10.02.2024)
- European Commission, Carbon Border Adjustment Mechanism, 2024. Available at: [https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism\\_en](https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en) (22.02.2024)

- Guy, Johnathan, Esther Shears and Jonas Meckling. “National models of climate governance among major emitters”, *Nature Climate Change*, 13(2): January (2023): 1-7. DOI:10.1038/s41558-022-01589-x.
- Hanson, Carter A. “Hard and Soft Law in the Paris Climate Agreement”, Student Publications. 925, (2021): 1-15. Available at: [https://cupola.gettysburg.edu/student\\_scholarship/925](https://cupola.gettysburg.edu/student_scholarship/925).
- Harlow, Carol. “Law and Public Administration: Convergence and Symbiosis”, *International Review of Administrative Sciences*, vol. 71(2), (2005): 279-294. DOI: 10.1177/0020852305053886
- Heinen, Deborah, Alessandro Arlati and Jörg Knieling. “Five dimensions of climate governance: a framework for empirical research based on polycentric and multi-level governance perspectives”, *Environmental Policy and Governance*, 32(1) (2022): 56–68. <https://doi.org/10.1002/eet.1963>.
- Huang, Jennifer. “A Brief Guide To The Paris Agreement And ‘Rulebook’ ”, The Center for Climate and Energy Solutions, 2019. Available at: <https://www.c2es.org/wp-content/uploads/2019/06/paris-agreement-and-rulebook-guide.pdf> (12.02.2024)
- Jänicke, Martin. “The Multi-level System of Global Climate Governance – the Model and its Current State”, *Environmental Policy and Governance*, 27, (2017): 108–121. DOI: 10.1002/eet.1747.
- Keles, Ruşen. “Çevre ve Koruma Sorunsalı” in *Yeşil Yeni Düzen*, Ankara: İmge Kitabevi, (2023): 19-93.
- Keles, Ruşen, Yusuf Erbay and Kemal Görmez. *Yeşil Yeni Düzen*, Ankara: İmge Kitabevi, 2023.
- Law no. 2019-1147 on Energy and the Climate, France, Climate Change Laws of the World, available at: [https://climate-laws.org/document/law-no-2019-1147-on-energy-and-the-climate\\_64b3](https://climate-laws.org/document/law-no-2019-1147-on-energy-and-the-climate_64b3). (20.07.2024)
- Lepage, Corinne. “Başka Türlü Yaşamak”, İmge Kitabevi, Ankara, quoted in Erbay, Yusuf. “Yeşil Yeni Düzen ve Yeşil Liderlik” in *Yeşil Yeni Düzen*, Ankara: İmge Kitabevi, (2023): 95-164.
- Lindblom, Charles E. (1959) “The Science of “Muddling Through”, *Public Administration Review*, Vol. 19, No. 2, Spring (1959): 79-88.
- MEU, Ministry of Environment and Urbanization (2018) Seventh National Communication of Türkiye Under The UNFCCC, 2018. Available at: [https://unfccc.int/sites/default/files/resource/14936285\\_Türkiye-NC7-2-Seventh%20National%20Communication%20of%20Türkiye.pdf](https://unfccc.int/sites/default/files/resource/14936285_Türkiye-NC7-2-Seventh%20National%20Communication%20of%20Türkiye.pdf) (22.02.2024)

- MEUCC, Ministry of Environment, Urbanization and Climate Change, TC Çevre Şehircilik ve İklim Değişikliği Bakanlığı, İklim Şurası'nda Alınan Önemli Kararlar, 2022. Available at: <https://agri.csb.gov.tr/iklim-surasi-nda-alinan-onemli-kararlar-haber-272193> (28.02.2024)
- Ministry of Trade, Green Action Plan, 21.07.2022. Available at: <https://www.trade.gov.tr/exports/green-action-plan> (25.02.2024).
- MoFA, Ministry of Foreign Affairs, 2022. Available at: [https://www.mfa.gov.tr/united-nations-framework-convention-on-climate-change-\\_unfccc\\_-and-the-kyoto-protocol.en.mfa](https://www.mfa.gov.tr/united-nations-framework-convention-on-climate-change-_unfccc_-and-the-kyoto-protocol.en.mfa) (29.11.2023)
- National Climate Change Adaptation Strategy and Action Plan 2011–2023, Ministry of Environment and Urbanization, [https://webdosya.csb.gov.tr/db/iklim/editordosya/file/eylem%20planlari/uyum\\_stratejisi\\_eylem\\_plani\\_EN\\_Final.pdf](https://webdosya.csb.gov.tr/db/iklim/editordosya/file/eylem%20planlari/uyum_stratejisi_eylem_plani_EN_Final.pdf) (25.02.2024)
- Official Gazette, 7.10.2021-No.31621 (Resmi Gazete, Sayı : 31621 (Mükerrer) 7 Ekim 2021) <https://www.resmigazete.gov.tr/eskiler/2021/10/20211007M1-1.pdf> (02.07.2022)
- Özer, Yunus Emre. “İklim Değişikliği Yönetişimindeki Aktörlerin Analizi ve Türkiye”, *Uluslararası Yönetim İktisat ve İşletme Dergisi*, Cilt 13, Sayı 4, (2017): 833-851.
- Presidential Decree, no. 85, 29.10.2021, Cumhurbaşkanlığı Kararnamesi no.85, 2021, Available at: <https://www.resmigazete.gov.tr/eskiler/2021/10/20211029.pdf> (25.02.2024)
- PSB, Presidency of Strategy and Budget, Presidency of the Republic of Türkiye (2024), 12th Development Plan, 2024. Available at: [https://www.sbb.gov.tr/wp-content/uploads/2023/12/On-Ikinci-Kalkinma-Plani\\_2024-2028\\_11122023.pdf](https://www.sbb.gov.tr/wp-content/uploads/2023/12/On-Ikinci-Kalkinma-Plani_2024-2028_11122023.pdf) (24.02.2024)
- Republic of Türkiye, Ministry of Trade, <https://ticaret.gov.tr/dis-iliskiler/yesil-mutabakat/yesil-mutabakat-eylem-plani-ve-calisma-grubu/ymcg-uyesi-kurum-ve-kuruluslar> (22.07.2024)
- Sancakdar, Oğuz. “İklim Değişikliğinin Kamu Hizmeti, Sürdürülebilir Kalkınma ve Temel Haklara Etkilerinden Kesitler ve İklim Davaları”, *İdare Hukuku ve İlimleri Dergisi*, (2023) 22: 99-129. <https://doi.org/10.26650/ihid.22.005>.
- Savasan, Zerrin. “Climate governance in Türkiye: a forward-looking perspective”, *Turkish Studies*, 20:4, (2019): 541-571. DOI: 10.1080/14683849.2019.1613895.
- Talu, Nuran and Habip Kocaman. Türkiye’de İklim Değişikliği ile Mücadelede Politikalar, Yasal ve Kurumsal Yapı, İklim Değişikliği Eğitim Modülleri Serisi 4, Ankara: T.C. Çevre ve Şehircilik Bakanlığı Çevre Yönetimi Genel Müdürlüğü, (2019).

- Terpan, Fabien. "The Definition of Soft Law" in *Research Handbook of Soft Law*, eds. by Mariolina Eliantonio, Emilia Korkea-aho and Ulrika Mörth, Cheltenham: Edward Elgar Publishing, (2023): 43-55.
- Türkoğlu-Üstün, Kamile. "Yeni Bir Dönemin Başlangıcı: Avrupa Yeşil Mutabakatı ve Türk Çevre Hukuku ve Politikalarına Etkileri", *Memleket Siyaset Yönetim (MSY)*, Cilt 16, Sayı 36, Aralık 2021, 329-366.
- United Nations, Paris Agreement, 2015. Available at: [https://unfccc.int/sites/default/files/english\\_paris\\_agreement.pdf](https://unfccc.int/sites/default/files/english_paris_agreement.pdf) (20.02.2024).
- United Nations, Climate Change, What is the Kyoto Protocol?, Available at: [https://unfccc.int/kyoto\\_protocol](https://unfccc.int/kyoto_protocol) (19.02.2024).
- United Nations, Climate Change, The Paris Agreement- What is the Paris Agreement?, Available at: <https://unfccc.int/process-and-meetings/the-paris-agreement> (20.02.2024)
- United Nations, Climate Change, What is the United Nations Framework Convention on Climate Change?, Available at: <https://unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change> (19.02.2024)
- United Nations, United Nations Framework Convention On Climate Change, 1992. Available at: <https://unfccc.int/resource/docs/convkp/conveng.pdf> (28.11.2023)
- United Nations, United Nations Decade on Ecosystem Restoration 2021-2030, 2021. Available at: <https://www.decadeonrestoration.org/about-un-decade> (20.02.2024)
- UN DESA, United Nations, Department of Economic and Social Affairs, Transforming our world: the 2030 Agenda for Sustainable Development, 2015. Available at: <https://sdgs.un.org/2030agenda> (24.02.2024)
- UNEP, UNEP 2008 Annual Report, 2009. Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/7742/-UNEP%202008%20Annual%20Report-2009837.pdf?sequence=3&isAllowed=y> (23.02.2024)
- van Thuyne, Gauthier. The Paris Rulebook after COP26, 2021. Available at: <https://www.allenoverly.com/en-gb/global/blogs/countdown-to-cop/the-paris-rulebook-after-cop26> (22.02.2024)
- Williams, David Samuel, Osman Balaban, Akgün Ilhan, Hande Paker, Ümit Sahin, Beyza Sarıkoç Yıldırım, Ethemcan Turhan, Baran Alp Uncu and Marta Olazabal. "A policy content analysis for evaluating urban adaptation justice in Istanbul", *Environmental Science and Policy*, 136 (2022): 476-485.

World Bank, Climate and Development: An Agenda for Action, 03.11.2022, Available at: <https://www.worldbank.org/en/topic/climatechange/publication/climate-and-development-an-agenda-for-action>] (14.06.2023)

World Bank Group, <https://data.worldbank.org/indicator/EN.ATM.CO2E.KT?end=2020&skipRedirection=true&start=1990&view=chart&year=1990>, (20.07.2024)

Yazar, Mahir and Abigail York. “Urban climate governance under the national government shadow: Evidence from Istanbul”, *Journal of Urban Affairs*, (2021): 1265-1281. <https://doi.org/10.1080/07352166.2021.1915151>

