IN SMUGGLE WITH CLIMATE CHANGE, EXTRA–BUDGETARY FUND APPLICATION AS AN INSTRUMENT OF GREEN KEYNESIAN ECONOMIC POLICY

EURASIAN RESEARCH JOURNAL ERJ, Vol. 6, No. 1, pp. 51-63, Winter 2024

Eurasian Research Journal Winter 2024 Vol. 6, No. 1.

https://doi.org/10.53277/2519-2442-2024.1-03 IRSTI 06.03.07 ISSN 2519-2442, KAZAKHSTAN Research Article

#### IN SMUGGLE WITH CLIMATE CHANGE, EXTRA-BUDGETARY FUND APPLICATION AS AN INSTRUMENT OF GREEN KEYNESIAN ECONOMIC POLICY

Mustafa Goktug KAYA<sup>1</sup> <sup>1</sup> Ministry of Family and Social Services of Türkiye, 06510, Ankara, Türkiye KTO Karatay University, Konya, Türkiye goktug.kaya@aile.gov.tr ORCID: 0000-0003-4124-4733

Fatih PEKSEN <sup>2</sup> <sup>2</sup> Ministry of Family and Social Services of Türkiye, 06510, Ankara, Türkiye fatih.peksen@aile.gov.tr ORCID: 0000-0003-4246-3460

Yigit YILDIZ<sup>3</sup> <sup>3</sup> Ministry of Treasury and Finance of Türkiye, 06510, Ankara, Türkiye yigitt1607@gmail.com ORCID: 0000-0001-7797-8240

Received: 25.12.2023 Corresponding Author: Mustafa Goktug KAYA Accepted: 19.01.2024

#### ABSTRACT

Green Keynesian Economics, which is a postmodern reflection of Keynesian economic thought, suggests that negativities, which are possible for environmental problems causing climate change to lead to, should be solved by active role public sector will undertake. As known, carbon emissions, emitted to atmosphere in global scale, may cause climate change via greenhouse effect. This case leads country economies to face to a set of problems. Green Keynesian Economics suggests a mix of simultaneous sustainable policies as a solution for a set of problems under consideration. The aim of this study is to suggest a financial instrument taking place in the scope of Green Keynesian School for Türkiye targeting to achieve net zero carbon emission as of the year 2053.

Keywords: Extra-Budgetary Fund, Green Keynesianism, Climate Change.

#### INTRODUCTION

Eurasian Research Journal Winter 2024 Vol. 6, No. 1.

When regarded to historical development of economic literature, it will be seen that there are in fact two economic schools, and that they are built in the thought that whether or not they take place in economic activities of government. Mercantilism, also referred to commercial capitalism, is based on the argument that national wealth is increased thanks to precious mines to be obtained by colonialism. In mercantilist doctrine, government has an absolute hegemony in all of economic activities. Physiocracy school, put forward by Quesnay and known agricultural capitalism, is built in natural order run. According to this, government must not intervene in commercial activities. In fact, mottos of "laissez fair, laissez pass" was introduced by physiocrats. So, physiocrats put forward that government had not to intervene in economic life. Traditional Economics School, which is also known as industrial capitalism, and which is an economic reflection of liberalism, is against intervention of government in economic life. Traditional economics recommends that government is to be small scale as possible as and to perform full public and goods and service-specified activities such as internal and external security, justice and diplomacy. Together with second half of 19th century, neoclassical economics that ended absolute hegemony of traditional economics made suggestions similar to traditional doctrine in terms of general structure. One of the points making distinct neoclassic economics from traditional economics is the presence of government in economic life. Neoclassic economics, in contrast to traditional economics, claims that government has to limitedly intervene in economic life. That the approach of "laissez faire" cannot account for 1929 Economic Depression led to search of new doctrine alternative to classic economics. At this point, Keynesian economics got involved. Keynes put forward that instabilities experienced in an economy resulted from lack of economic demand. At this point of removing this inadequacy that is encountered, he emphasized that government had to intervene in economy. Along with the 1970s, monetarists that are very famous put forward that activities of government in economic life are useless and challenged government intervention.

The concept of sustainable development being a current issue, beginning from 1980s, has a critical importance especially in terms of developing countries. Because, in some countries, production factor that will test stable economic growth is inadequate compared to developed countries. This case obliges developing countries to take some actions, which will not impede economic development. In other words, in developing countries policymakers are actively involved in economic activities.

At the present time, in the context of sustainable development targets in terms of developing countries, one of the biggest risks is climate change and negativities that is reflection of it. Almost all scientists agree that the main source of negativities under consideration is global carbon emission emitted to atmosphere. Since the years, when the problem has first emerged, neoclassic economics that is dominant economic approach suggests to use market-based methods that are similar carbon trade to remove negative externalities occurring as a result of global warming. In return to this, while urgency of problem requires to develop tangible mechanisms for immediate solution, in applications of various countries, it is seen that market-based instruments are not adequately effective and do

Eurasian

Research Journal

Winter 2024 Vol. 6, No. 1.

not bring a rapid solution. Therefore, alternatively to neoclassic thought, radical approaches are put forward, which argues that the problem arises from capitalism and that capitalist relationships have to be left. On the other hand, some moderate approaches, which try to solve the problem in compliance with the system and target social negotiation, have begun to develop. In this context, the "Coase Theorem" put forward by Ronald Coase in 1960 is an important milestone. Coase is not actually talking about a theory with the ideas he puts forward in his work "The Problem of Social Cost". According to Coase, the phenomenon of ownership should be taken into consideration in eliminating negative externalities and in the efficiency of resource use. Paradigm change of interest unavoidably brings with it a new intervenient formation in economic schools. As a result of paradigm change experienced, one of the approaches standing out among the approaches mentioned about is also Green Keynesianism. New Keynesianism is an approach aiming to simultaneously solve all of contemporary problems such as both environmental problems and unemployment. Green Keynesianism differs from neoclassic economics about the presence of government for solution of especially global warming. In other word, Green Keynesianism targets to mobilize not only market-based instruments but also various complementary instruments in leadership of government. In this new school, referred to Green Keynesian Economics, government affects economic activities with instruments of monetary and fiscal policy. The thought of Green Keynesianism has emerged in a pessimist environment 2008 Global Economic Crisis created. The aim in Green Keynesianism, as mentioned above, is not only solution of environmental problems. Beside this, it handles all problems related to energy, food, drinking water and even natural disasters. While these problems are mentioned in the important parts of the world, millions of people at global level were affected from these problems. Therefore, Green Keynesianism introduces an approach struggling with these problems concerning all world regardless country or region. Applications of Green Keynesianism were implemented in two ways. The first of these, following global financial crisis, is financial incentive package executed in the leadership of the countries such as USA, China, South Korea and Japan. Another approach, referred to green order, is a strategy suggesting to use the various instruments with the various purposes such as renewable energy and energy efficiency as well as developing extra industries, providing extra income for government. The aim of this study, for Türkiye, which takes place in the developing countries and sets net zero carbon emission targets for 2053, is to suggest an instrument of fiscal policy in the context of Green Keynesian School. For achieving this aim, the expression that "is only legal regulations enough or is there any need for fiscal policy in struggling with climate change" was determined as study question.

When business models and industrial structure in our age are brought into mind, it will not be wrong to qualify the target Türkiye set as assertive. However, there are many things that is necessary to be done and many actions to be taken for catching this assertive target. Legal regulations are the first instruments coming into mind in this scope. It is possible that supporting these regulations with economic and fiscal instruments plays key role in terms of the targets set. Because fiscal instruments have a high potential in affecting the economic decisions the individuals and institutions will make. A new tax imposed and incentive provided by policymakers will lead economic decision units to review the decisions they will take. Following the concept of homo-economicus, individuals and in-

stitutions will leave the areas imposed extra tax and go toward the area, where there are incentives. The focus point of the study, in the process going to the target of net zero carbon emission, is to affect the economic activities of the economic decision units with an orientating tax and encouraging incentive system in such a way that it will provide the mechanism given place.

Orientating tax and encouraging tax systems, put forward in the study ignores "pay as you pollute principle", which is one of the main principles of environmental law. In other words, with the suggestion we are going to introduce for Türkiye, it is aimed that economic decision units make activities, which will not lead to carbon emissions, among the main factors of climate change. The suggestion we are going to introduce in this direction, incorporates carbon tax and emission trade systems, which are reflection of a large amount of studies, carried out about the subject in the literature, and is based on "pay as you pollute principle". In installation of the study, due to suggesting a fiscal instrument without giving place the principle of interest, this study differs from the studies carried out in similar areas and makes contribution to the literature.

In the main characteristic of the suggestion "fiscal instrument" given place in the study, punishing carbon emissions, the primary reason for climate change, and promoting green friendly technologies. In this direction, the distribution of carbon emission in Türkiye according to sectors is based on. In tax system we install, extra budgetary fund stoppage is brought for the consumption of fossil-based inputs, used by the sectors relatively emitting more carbon to atmosphere. In return to this, thanks to environmentally friendly technologies, the sectors using renewable energy resources in production are encouraged. Among these financial instruments, which are essentially similar financial liabilities, the "Combating Climate Change Share" will be collected at the rate of 2% of the fossil fuel consumption price, and the "Environmental Protection Fund" will be collected at the rate of 1% of the fossil fuel consumption price. At this point, the question "why it is not exposed tax for fossil-based inputs instead of putting extra budgetary fund stoppage" may come into mind. What is the underlying putting extra budgetary fund stoppage as an instrument of fiscal policy is to completely allocate the input obtained from reduction made for struggling with climate change. If the tax is exposed instead of extra budgetary stoppage, all income obtained in this case would go to budget of central government, which is pool of all incomes. The expenditures are done through this income. Initiative here is on political authority. Government itself determines the composition of public expenditures according to the state of economic cycle and can realize expenditures from this pool of income. This may seem a normal case at the first look. However, in extraordinary cases such as COVID-19 and global economic crisis, when expenditure regimes of government are brought into mind, it will be concluded that reductions made for using in struggle with climate change, can be used for the different aims. This case can lead to ineffectiveness in resource allocation in terms of climate change.

Another important issue related to extra budgetary fund application, introduced in the study, is fiscal audit. In the system we install, at the point of struggle with climate change, an institute making expenditures, which can play an active role, at the point of struggle with climate change, will be created, and the income obtained via fund stoppage will be transferred to the budget of the institute or organization under consideration. The fiscal and performance supervision of the income obtained from the fund of interest will be executed by Turkish Court of Account.

Eurasian Research Journal Winter 2024 Vol. 6, No. 1.

The tax and promotion system we have installed can be criticized due to the fact that it is contradictory to the phenomenon of fiscal discipline of extra budgetary funds. However, thanks to audit that is effective and based on the principles of economic effectiveness, which can be Turkish Court of Account, its moving away from fiscal discipline will be able to be impeded. The fact that the gains this fiscal instrument, appalled for a supreme aim like struggling with climate change, can provide more than negativities they can introduce is highly possible.

## THEORETICAL FRAMEWORK

Green Keynesian Thought is of the thoughts first being a current issue immediately after 2008 financial crisis. Green Keynesianism targets on simultaneously eliminating instabilities in labor market and removing negativities related to environment that is international public goods. Even though it seems a new stream, historical root of Green Keynesian Thought dates to 1929 Depression. New order, which a current issue after Great Depression, and which was resultant of various theories and which was occurred with the attempts of Roosevelt, USA President, are the keystones of Green Keynesian Thought (Thompson, 2008: 5).

According to neoclassic economics, climate change and the costs it creates arise from not optimally allowing resources and low value natural capital policy (Loiseau et al., 2016: 362). Although neoclassic economics identified the source of negativities mentioned, social change directed to removing negativities cannot be mostly pronounced (Rezai, et al., 2013: 70). That neoclassic school does not suggest solution in this area prepared an environment for environmental economy to emerge and develop (Cato, 2009: 7).

Green Keynesian Economics is the resultant of environmental economy and Keynesian macroeconomics (Harris, 2013: 3). In other words, Green Keynesian Economics, like Green Economics, is a sector that is necessary to be scrutinized under the roof of environmental economics. Due to this characteristics it has, Green Keynesian School are utilized as social democrat version of Green Economics (Sweeney, 2015: 12).

Green Keynesian Economics aims to pass to sustainable stage of resource distribution with optimal resource distribution. In direction of this aim, it is based on the opinion that government intervenes in economy by means of the policies it develops (Tienhaara, 2018: 5). According to another view, the main aim of environmental Keynesianism is to create effective demand and impede disappearance of planet via political authority to encourage low carbon industries and green friendly activities (Blackwater, 2012: 51). According to a different view, Green Keynesianism is the state, adapted to the present time, of original Keynesian Fiscal Policy with sustainable environment and ecological purposes. Green Keynesianism made a current issue several problems of economic structure at the present time such as income and welfare injustice, the dependence of economic activities on fossil fuels and sustainable economic growth (Harris, 2013: 4).

The number of those supporting Keynesianism from various schools is not in considerable amount at all. The unique issue the various economic schools supported Green Keynesianism is the government, which actively plays a role in economic life. In other words, the fact that the government removes malfunctions in labor markets increases individual welfare, arranges economy for catching stable economic growth via public incomes and public expenditures is supported (Wainwright and Mann, 2018: 97).

Price mechanisms, one of the fundamentals of market economy, according to environmental economy remains incapable in conserving resource in middle and long term. In similar way, the run of price mechanism does not become remedy for fossil fuels whose effect continues over years. In these areas, there is a need for political authority. In other words, for catching the level of stable growth and providing sustainable ecological activities, Green Keynesianism puts forward that active intervention of government is necessary (Harris, 2013: 3-4).

## STRUGGLE OF TÜRKİYE WITH CLIMATE CHANGE

As given place in the previous section of the study, carbon-based fuels releasing high amount of energy can lead to global warming, thus, climate change, which harms countries with natural disasters such as forest fires, flood disasters, etc.

According to a study carried out by McKinsey Global Institute, it is expected that climate change creates devastating impacts on Turkish economy. Türkiye, together with Egypt, Iran and Mexico, takes place among the countries, which will experience the most drought results from climate change until 2050 (McK-insey Global Institute, 2020: 104). This possible scenario will be able to jeopar-dize liveability in Türkiye, supply chains related to scarcity of water, usability of natural resources, especially agricultural areas, in considerable amount; in short, will be able to impede sustainable development. This situation may lead to significant disruptions in the supply chain, as well as in the agricultural and logistics sectors.

Turkish public administration that is aware of the importance of the case went on attack about developing policy in the area of climate change as of the second half of the year 2021. In this direction, in the period of July 2021, Ministry of Trade published "Green Agreement Action Plan". This plan is a vital milestone with regard to "green economy", defined as heartening economic growth and development by conserving natural resources providing to be sustained the resources and environmental cycle, which increase welfare level of individuals (OECD, 2011: 4).

Another move made about climate change in Türkiye is the law no. 7335, published in Official Journal dated of October 07, 2021 and numbered 31621. This law accepted approval of Paris Climate Treaty, signed on the date of April 22, 2016 on the name of Grand National Assembly of Türkiye.

With No.85 Presidency Decree, published in Official Journal, dated October 29, 2021, the name of Ministry of Environment and Urbanization was replaced as "Ministry of Environment, Urbanization and Climate Change". Under mentioned Ministry, "Climate Change Headship" was established.

In a struggle with climate change, in Türkiye entering structural transformation, arrangements in the judicial area, given place above, have great importance. In Research our opinion, besides legal regulations, economic and fiscal applications to be appealed will be more effective in struggle with climate change.

Eurasian Journal Winter 2024 Vol. 6, No. 1.

# FISCAL INSTRUMENT SUGGESTION FOR NET ZERO EMISSION TARGET

In struggle with climate change, we consider that fiscal application that will complete legal arrangements made will be taxing. As expressed above, taxing is an effective, income providing and functional instrument, given to governments. There are taxes called carbon tax appealed directed to this aim Carbon tax application is based on the "Pay as you pollute principle can be shortly defined as participation of those causing negative externalities in the cost of government made public expenditures to impede and taking under supervision negative environmental externalities (Yilmaz, 2017: 139). For Türkiye targeting on achieving net zero emission in 2053, in this study aiming to make a fiscal policy-based solution suggestion, taxing given place has a structure that is completely different from carbon tax and pay as you pollute principle". Because in carbon tax application, government permits to pollute to economic decision units less or more: Taxing we suggest is disincentive about polluting environment and encouraging about appealing to environmentally friendly applications.

In our study, taxing suggested for Türkiye, is not in fact environmental tax. Because the income obtained from environmental taxes, in accordance with nondiscretionary appropriation principle, like the other tax incomes, cannot be specific to realize certain aims. In addition, in accordance with "unity principle" among budgeting principles, all public incomes are used for financing public expenditure through single budget. A single treasury belonging to government is formed and the incomes collected specific to a single budget are used by subsidizing for expenditures of the relevant units (Acar, 2006: 220).

As a result of some economic activities carried out in a country, in eliminating negative externalities carbon-dense emissions, released to atmosphere, form, in terms of taking expected results in taxing, it is critically important to completely canalize the income obtained from taxing to this area.

In eliminating negative externalities occurring on environment, encouraging and disincentive feature of taxing can have a functional structure. With taxing made, on the one hand, activity leading to negative externality is punished, on the other hand, alternative activity that can subsidize this activity will have been encouraged. Thus, "taxing climate" considering knife edge balance between negative externalities emerging on environment due to activities of individuals and sustainable development and also orientating investment decisions of entrepreneurs will have been created.

The main aim of taxing we will suggest for Türkiye is to punish the consumption and investment directed to fossil fuels that are rich in terms of carbon content and encourage investments based on environmentally friendly renewable energy resources. Taxing to be made through fossil fuels means cost increase for entrepreneurs. Thus, energy costs keep an important place in total costs in industrial

production. Entrepreneurs that are in decision stage about whether or not to invest will prefer green energy and provide low-cost advantage.

In orientating entrepreneurs to renewable energy, affecting their investment decisions, environmental technologies will play a complementary role in this direction, it is not surprising that policymaker's discriminative incentives provide important gains in in especially renewable energy technologies in obtaining from green taxing.

Tax reduction, tax delay, buying guarantee and discounted corporate tax to be provided for the enterprises being active in renewable energy production are of some incentive applications that can be effective in this context. It is possible for applications such as long-term gain exceptions and insurance premium incentive to be provided for especially for entrepreneurs due to their activities under consideration and insurance premium incentive to strengthen the decision of investment decision of both domestic and foreign investors (Sut Goker, 2019: 109). In this context, it can be expected that incentives directed to R&D activities in carbon catching, storing and transforming areas may provide to important gains for Türkiye economy in terms of 2053 vision.

Another application suggestion directed to encouraging renewable energy production is for the law of no. 197 Engine Vehicle Tax (EVT). With a paragraph to be added to 4<sup>th</sup> item concerning "exceptions", all electric vehicles, which do not fossil fuel can be kept exempt form EVT regardless of vehicle value, motor cylinder volume and age.

Another taxing instrument to provide encouraging electric vehicles and engendering less carbon emission is expenditure taxes. In this context, the delivery of zero-kilometer vehicle is included in the subject of value added tax and the first acquisition of those subjecting to recording and registration among the same vehicle, to the subject of special consumption tax. With a legal regulation to be done, exemption of value added tax and special consumption tax to be applied to electric motor vehicles will shift the demand of zero-kilometer vehicle from fossil – fuelled internal-combustion vehicles to electric motor vehicles.

In total budgetary incomes in Türkiye VAT and SCT collected from expenditures have an important share. From this as aspect, the exemption suggestion made above can seem to lead to decrease in budgetary income at the first look. However, the share of fossil fuels<sup>2</sup> in total import of Türkiye is brought into mind, the probability that net effect of our taxing suggestion for VAT and SCT on the budget is zero or even positive emerges. When the possible negativities climatic change will create are taken into account, it will not be wrong to expect that worsening will not occur in terms of budgetary balance.

Another element having an important place in preferring electric motor vehicles is also prevalence of charging stations for vehicles. For increasing investments to charging stations, the investments to be made in this area can be included in the scope of investment incentive certificate regardless of interregional

<sup>2</sup> According to the data of Türkiye Statistical Institute, Group of Mineral Fuels, Mineral Oils and products obtaining preparation of these, bituminous substances, mineral paraffin take place in the first order in total import https://data.tuik.gov.tr/Bulten/Index?p=Dis-Ticaret-Istatistikleri-Oc-ak-2022-45536. Accessed: 01.07.2023.

differences. As a result, in greenhouse gas emission among the main factors of climatic change, important gains will be able to be obtained in direction of 2053 targets.

Eurasian Research Journal Winter 2024 Vol. 6, No. 1.

Another component of our suggestion about taxing is related to no. 1319 real estate tax law and valuable housing tax recently included in our tax system. House owners producing electric energy to be included solar energy panel in their houses can be exempt from real estate tax with a legal regulation to be done and from valuable housing tax on condition that it the necessary terms and conditions are performed.

Taxing suggestions made until here is directed to supply of renewable energy by encouraging in terms of taxing. In removing negativities of climate change, taxing area we suggest for Türkiye is related to use of energy. For struggling with climate change, the main instrument we suggest in taxing energy is similar fiscal obligations. Thanks to fiscal obligations such as "Share of Struggle with Climate Change" and "Environmental Protection Fund" to be created, we think of that the resource needed for struggle with climate change will be provided.

Among our suggestions directed to taxing energy use, Share of Struggle with Climate Change will be collected fiscal obligation in the rate of 2% of the price of fossil fuel consumption and Environmental Protection Fund in the rate of 1% of fossil fuel consumption. According to our suggestion, in addition, these sums that are collected will be transferred to Climate Change, established with no.85 Presidency Decree, published dated of October 29, 2021. Of course, for installation of cycle specified, it is necessary to make a lot of legal regulation.

Behind not suggesting traditional taxing but Share of Struggle with Climate Change and Environmental Protection Fund, "Nondiscretionary Appropriation Principle" and 13/g provision of no.5018 law take place. If the suggestion we made will take place in the scope of central administration budgetary incomes, the income obtained could not wholly be specific to struggle with climate change. Fluctuations that can occur in economic cycle can impede struggle with climate change in terms of resource. However, in taxing to be made in the form of similar fiscal obligation, the share of this probability will decrease.

The income obtained by two similar fiscal obligations we suggest for Türkiye, on the condition that the necessary legal regulations are performed, can find a place for itself among the incomes of Climate Change Headship and these incomes can be used in the necessary expenditures that are necessary to struggle with climatic change. Again, with necessary legal regulations, fiscal audit of the incomes obtained from fiscal obligations of interest will be made by court of account on the name of Grand National Assembly of Türkiye.

In addition, this suggestion can seem to be against unity principle that can be defined as showing all incomes and expenditures of government in a single budget. However, currently, in Turkish fiscal system, there are also some exceptions of unity principles such as recovery share, tourism share. For realizing a purpose like climate change, we consider that a tolerable exception can be added to the principles of interest. As given place in the previous sections of the study, possible effects climatic change will create has irreversible quality. Due to this feature of it, we think that struggle with climate change deserves to be exception of "unity principle".

It is likely that this proposal we have made on the way to Türkiye's carbon neutral target will have difficulties in implementation. The most important of these difficulties is political feasibility. Because the application of extra-budgetary funds is similar to a tax in many respects. The emotional resistance of taxpayers to the extra-budgetary fund application mentioned above will undoubtedly put the government in a difficult situation. This possibility may push policymakers back to the point of implementing the said fund application. As it is known, fossil fuel consumption is perhaps one of the main factors of environmental problems. Binding decisions of supranational organizations may be an effective solution for the non-implementation of our extra-budgetary fund proposal, which aims to reduce carbon emissions released into the atmosphere as a result of fossil fuel consumption and encourage the use of renewable energy, due to lack of political feasibility. As a matter of fact, environmental problems are an important issue that concerns not only the country within its borders, but also all countries on a global scale and needs to be solved. "It is highly likely that this problem will be eliminated thanks to transnational cooperation."

## CONCLUSION

Greenhouse gases, due to radiation they contain, lead to global warming. This increase of heat causes the amount of precipitation to more decrease in the regions relatively receiving less rain, on the other hand, in the regions receiving more rain, to excessive rains and floods.

Changes of interest occurring at climate leads to continuous losses in country economies and can impede their sustainable development targets. That developing countries desiring to include in the class of developed countries by effectively using resources they have are more affected from climatic changes is possible. Because economies of countries under consideration cannot complete their structural transformations yet. In addition, the inputs to provide stable economic inputs are not ample. While the case is so, when the existing economic activities harm due to climate change, the case can transform into a full dilemma.

Climate change threatening not only developing countries but also world economies led attention to be directed to environmental policies. For protecting environment in the scope of global goods, supranational agencies, the various attempts are made. In this context, in 1972, United Nations Environmental Conference was held in the Stockholm, capital of Sweden. Stockholm The conference, called "Stockholm Conference" is the first attempt made in global scale about struggle with environmental pollution. In addition, with United Nation Climatic Change Framework Convention, Kyoto Protocol and Paris Climate Convention are the other milestones in global scale about struggle with climatic change.

Struggle with climate change, due to the fact that environment is a public goods, requires international cooperation. However, national climate change overlapping global attempts governments will put into operation can increase effectiveness of struggle with climatic change.

Although treaties are made in this way in the area of global warming a climate change, the necessary steps could not be taken from economic point of view. Neoclassic economics, which are generally acceptable in that period as prevailing economic policy, satisfying solutions could not be found for the problem with global warming and climate change. According to the doctrine mentioned, the cause of environment-based negativities such as climate change and global warming is not being able to optimally allocate resource and low natural capital policy adopted. Unsuccessful attitude neoclassic economics exhibited in these matters concerning all word led to paradigm change in terms of economic policy. Many theoreticians that are members of different schools put forward that it is necessary for government to actively intervene in the issues of global warming and climatic change. As a result, in the early 1990s, the concept of green economy emerged. As given place in the previous sections of the study, the emergence of Green Keynesianism Stream corresponds to immediately after 2008 global financial crisis. Global crisis experienced made again current issue the subjects of global warming and climatic change put aside.

In Türkiye, together with the second half of 2021, the decisive and radical steps have begun to be taken about struggle with climatic change. In this direction, "2053 Vision" targets, set about struggle with climate change, have a great importance. Türkiye, which clearly sets the zero-carbon emission for the year 2053, has begun to implement legal regulations in the direction of this target. However, we are of the opinion that it will be difficult to achieve these targets with only legal regulations. By means of economic and fiscal instruments, making functional the necessary incentive and disincentive applications will have vital importance in terms of sustainable development cycle of Türkiye. At the point of achieving these targets, active intervention of government is sine qua non.

For decisively struggling with climate change, our Green Keynesian taxing for Türkiye consists of the mix of tax and similar fiscal obligation taking place in the scope of public incomes. Our taxing suggestion aiming to reduce carbon emissions released to atmosphere from fossil fuels that is primary factor leading to the formation greenhouse gas has a two-staged structure. At the first stage, encouraging production of renewable energy is the main target. In this direction, while fossil fuels and production activities used for them are punished by discriminative tax application, environmentally friendly green technologies and inputs are not taxed at all, at least, are subjected to low level taxing. In this area, Motor Vehicles Tax, Value-added Tax and Special Consumption Tax come into our face as taxes, on which orienting tax applications can be made.

The other stage of our taxing suggestion targets on consumption of fossil fuels. In this stage aiming the entrepreneurs and individuals to orientate renewable energy consumption rather than fossil fuels, as a result of making the necessary legal regulations, similar fiscal obligations such as "Share of Struggle with Climate Change" and "Environmental Protection Fund" we believe in the scope of Green Keynesian Stream are suggested to be integrated into our taxing system. So, Climate Change Headship as making expenditure will be able to accelerate renewable energy investments with both share it takes from central administration budget and share of struggle with climate change and incomes collected from Environmental Protection Fund. Under this suggestion, the fact that public income cannot be specific to specific certain public expenditures lies. If central

Eurasian Research Journal Winter 2024 Vol. 6, No. 1.

management suggested an environmental tax to include in the scope of budget, the collected income may not be reserved for struggling with only climate change. However, thanks to the fiscal instruments we suggest, Climate Change Headship will completely make the incomes it obtains specific to the struggle with climate change.

In 56<sup>th</sup> item of Constitution of Republic of Türkiye is ensured that "everyone has the right to live in the healthy and balanced environment, and that developing environment, protecting environmental health and preventing environmental pollution are the duties of government and citizen". In this direction a roof law, we can accept constitution of climate change, must be urgently enacted, which will comprise for the steps Türkiye will take in struggle with climate change. In preparation process of the law under consideration, providing the participation of universities, the relevant nongovernmental organizations, relevant ministries and the other representatives of the sector has a sin quo non feature in terms of becoming holistic of the subject. Especially coordinated activities of central administration and local administration organizations will be able to provide important gains in struggle with climate change.

In achieving 2053 targets, key role is to reduce carbon – contented emissions. For reducing this emission, it is necessary for Türkiye's energy policy to evolve from fossil fuel resources to renewable energy resource. In this direction, carbon trace map of Türkiye must be objectively formed. The activities, which lead global warming and high carbon emission, must be reviewed and deterred with taxing. Environmentally friendly renewable energy resourced activities must be encouraged with taxing.

It is a fact that climate is rapidly changing. For removing negativities climate changes may lead to, it is necessary for Turkish public management to change more rapidly than climate. Taxing system, maybe, is the first of changing areas of interest. Rather than "pay as you pollute principle", environmentally friend-ly preventing pollution arrangements will perform important duties in catching 2053 vision about climate change of Türkiye.

#### REFERENCES

Acar, Ibrahim Atilla (2006). "Vergilemede Tahsis Ilkesinin Cevre Vergileri Journal Acisindan Degerlendirilmesi". Suleyman Demirel Universitesi Iktisadi ve Idari Vol. 6, No. 1. Bilimler Fakultesi Dergisi, 11(1): 215-232.

Eurasian Research

Blackwater, Bill (2012). "Two Cheers for Environmental Keynesianism". Capitalism Nature Socialism, 23(2): 51-74.

Cato, Molly Scott (2009). Green Economics: An Introduction to Theory, Policy and Practice. London: Published by Earthscan.

Harris, Jonathan M. (2013). Green Keynesianism: Beyond Standard Growth Paradigms, Global Development and Environment Institute Working Paper, No. 13-02: 1-19.

Loiseau, Eleonore, Laura Saikku, Riina Antikainen, Nils Droste, Bernd Hansjurgens, Kati Pitkanen, Pekka Leskinen, Peter Kuikman and Marianne Thomsen (2016). "Green Economy and Related Concepts: An Overview". Journal of Cleaner Production, 139: 361-371.

McKinsey Global Institute (2020). Climate Risk and Response: Physical Hazards and Socioeconomic Impacts, Climate Risk and Response. Retrieved from https://www.mckinsey.com/~/media/mckinsey/business%20functions/sustainability/our%20insights/climate%20risk%20and%20response%20physical%20 hazards%20and%20socioeconomic%20impacts/mgi-climate-risk-and-response-full-report-vf.pdf. Accessed: 01.07.2023.

Rezai, Armon, Lance Taylor and Reinhard Mechler (2013). "Ecological Macroeconomics: An Application to Climate Change". Ecological Economics, 85: 69-76.

Sut Goker, Cagil (2019). Surdurulebilir Cevre Hedefinde Enerjinin Vergilendirilmesi. Istanbul: On Iki Levha Yayincilik.

Sweeney, Sean (2015). "Green Capitalism Won't Work." New Labor Forum, 24(2): 12-17.

The Organisation for Economic Co-operation and Development (OECD) (2011). Towards Green Growth: A Summary for Policy Makers. Retrieved from https:// www.oecd.org/greengrowth/48012345.pdf. Accessed: 01.07.2023.

Thompson, Sean (2008). The Limits of Green Keynesianism. Retrieved from https://climateandcapitalism.com/2008/10/09/the-limits-of-green-keynesianism/#more-552. Accessed: 01.07.2023.

Tienhaara, Kyla (2018). "Green Keynesianism and the Global Financial Crisis." by Routledge, Park Square, Milton Park, Abingdon, Oxon OX14 4RN and by Routledge 711 Third Avenue, New York: Routledge.

Turkish Statistical Institute (2021). Foreign Trade Statistics. Retrieved https://data.tuik.gov.tr/Bulten/Index?p=Dis-Ticaret-Istatistikleri-Ocfrom ak-2022-45536. Accessed: 01.07.2023.

Wainwright, Joel and Geoff Mann (2018). Climate Leviathan A Political Theory of Our Planetary Future. London-Newyork: Verso Books.

Yilmaz Turgut, Nukhet (2017). Cevre Politikasi ve Hukuku. Ankara: Imaj Yayinevi.