# CAN THE GREEN ECONOMY BE A SOLUTION FOR THE ECOLOGICAL CRISIS?

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ABSTRACT Research Paper

There has been a widespread consensus on deepening ecological crisis since the early 1970s during which the world economy started to show signals of world economic crisis. Ecological crisis is not independent of economic crisis. As economic crisis deepens, we have been witnessing acceleration in commodification of new facets of nature. Moreover, the approach of incorporation of all life forms and eco systems into the price mechanism is launched with an "environmentalist" discourse as green economy by the prestigious international institutions. They argued in their various reports that there is a harmonious relationship between growth and protection of environment. In this paper it is argued that green economy provides a new field for profitable investments. Thus, ecological crisis deepens instead of being solved. Behind the green economy argument there is not environmental considerations, instead it is seen as a new field for profitable investment opportunities to overcome the economic crisis. Therefore, it can not be a solution for the ecological crisis

**Keywords:** Green Economy; Global Green New Deal; World Economic Crisis; Ecological Crisis

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## YEŞİL EKONOMİ EKOLOJİK KRİZE ÇÖZÜM OLABİLİR Mİ?

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ÖZET Araştırma Makalesi

Dünyada ekonomik kriz belirtilerinin ortaya çıkmaya başladığı 1970'li yıllardan beri giderek derinleşen bir ekolojik kriz olduğu konusunda geniş bir görüşbirliği vardır. Ekolojik kriz ekonomik krizden bağımsız değildir. Ekonomik kriz derinleştikçe doğanın farklı boyutlarının metalaşmasının hızlandığına tanık olunmaktadır. Bunun da ötesinde, bütün yaşam formlarının ve ekosistemlerin fiyat mekanizmasına içerilmesi yaklaşımı, "çevreci" bir söylemle yeşil ekonomi olarak uluslararası prestijli kuruluşlarca dolaşıma sokulmuştur. Bu kuruluşlar, değişik raporlarında büyüme ve çevre koruması arasında pozitif yönlü bir ilişki olduğunu öne sürmektedirler. Bu çalışmada yeşil ekonominin karlı yatırım fırsatları sunan yeni bir alan olduğu iddia edilmektedir. Dolayısıyla ekolojik kriz çözümleneceğine derinleşmektedir. Yeşil ekonomi tezinin ardında çevreyle ilgili endişelerden çok krizi aşmak için yeni ve karlı yatırım fırsatları sunan bir alan olarak görülmesi yatmaktadır. Dolayısıyla yeşil ekonomi ekolojik krize çare olamaz.

**Anahtar Kelimeler:** Yeşil Ekonomi; Küresel Yeni Yeşil Düzen; Dünya Ekonomik Krizi; Ekolojik Kriz.

Jel Kodları: Q13, Q5

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#### INTRODUCTION

There is a widespread debate on that world is undergoing two types of interrelated crises which have been intensified since the beginning of the 1970s: Economic crisis and ecological crisis. Although there are fundamental differences on explanations of economic crisis, there is a broad consensus among these approaches on cyclical path of capital accumulation process in capitalism. Prevalence of another type of crisis which is called climate crisis or better to call it ecological crisis has started to affect our lives dramatically. In spite of the both crises are intertwined and interrelated, general tendency is to urge upon the ecological crisis. Especially international institutions such as United Nations Environment Programme (UNEP), World Bank, and Organisation for Economic Co-operation and Development (OECD) have been emphasizing ecological crisis since 2008 to conceal the world economic crisis. These institutions and some popular organisations of the system such as some thinktanks, environmental NGOs, development Agencies etc. which are often funded by multinational corporations and by these international institutions promote and circulate that ecological crisis can only be overcome by perfectly functioning market system and this can be achived by internalising "externalities". According to New Institutional Approach, imperfections in the market system can be eliminated by defining and guaranteeing private property rights and by pricing natural and social commons worldwide. For this approach all life forms and eco systems can and should be priced and internalised in the market system for the sake of environmental protection (see Daly, 2007). Neoliberal and New Institutional theories, which complete one another, paved the way for dominance of green economy discourse at the end of the 1990s and it became popular after the 2008 economic crisis. However, the idea of green economy was cultivated in the framework of sustainable development that was launched at the end of the 1980s, since then brown industrial capitalism has become green capitalism (UNEP, 2009a: 16). Policies of green economy spread into the fabrics of the whole system as cures of not only environmental problems but also of poverty. What is more, it is adamantly argued that with the policies of green economy environmental protection and growth would be achieved similtaneously.

Scope of green economy extends from new green technologies to labelling of products and services as 'green', 'sustainable', or 'environmentally friendly' on

the one hand and financialisation of nature on the other. Through green economy discourse production of naturally developed seeds via generations are started in the laboratories by scientists working for large corporates, animals and plants are cloned, genetically modified foodstuff and animals are produced in the laboratories (Smith, 2007: 29). All these technologies are protected by intellectual property rights which provide monopolistic rents to these corporates and became one of the main sources of accumulation (Harvey, 2014: 142). Various types of other green technologies and businesses are generated by environmental catastrophes such as improvement of natural quality of degraded habitats by the companies, development of new medications and treatments to cure health problems caused by air-land and water pollution, new technologies to alleviate carbon emissions, renewable energy technologies such as solar and wind power plants; production of environmentally friendly goods; creation of new financial instruments such as green banking, green credits, carbon shares, biodiversity credits etc.

Although foundations of green economy argument can be found at the end of the 1980s, not suprisingly the argument has become popular especially since 2008 economic crisis. Numerous reports on green economy are published in 2008 and afterwards. All these reports have been treating green economy as a source of new jobs and growth, and new economic opportunities explicitly, it is even argued that poverty would be eradicated by these policies while environmental problems are cured.

This study argues that the main sources of the economic crisis can be found in difficulties finding new profitable investment opportunities for the investors in line with Harvey's analysis of crisis (1981; 2016). Green economy provides a new field for profitable investments as explicitly indicated in the reports of international institutions, therefore accelerates capital accumulation. However, it is not an appropriate solution for the ecological crisis and poverty. As economic crisis deepens capitalization of nature accelerates and new facets of nature becomes the subject of market mechanism and private property in the framework of green economy. Thus, ecological crisis deepens instead of being fixed. Behind the green economy argument there is not environmental considerations, instead it is seen as a new field for profitable investment opportunities to overcome the crisis. Therefore, it is a green "fix" for capital accumulation rather than for ecological crisis (Purkis, 2019). Policies of green

economy also offers new opportunities to expropriate surplus accumulated by the generations of local people around the world, especially in the global South (Lohmann, 2012) and leads to intensification of power and accumulation in the global North (see Bracking 2015; Lohmann 2005, 2012; Osborne 2015; Macafee 1999, Sullivan 2013). Thus, inequality gap among the world's population increases drastically and the most vulnerable parts of the world's population together with the whole ecosystem bears the brunt of accelerating ecological crisis.

In this study, the subject is mainly treated by evaluating some of the reports critically, which are published by the international institutions such as UNEP, WB and OECD, which are the key actors for promoting the green economy concept.

# 1. Green Economy and Climate Change in the Reports of International Institutions

As it is mentioned above, the idea of green economy has its roots in the late 1980s<sup>3</sup>. First important report about the subject is written by Sir Nicholas Stern who is one of the chief economists of the World Bank. Stern's report "The Economics of Climate Change" is published in 2006. According to this report "the costs of stabilising the climate are significant but manageable; delay would be dangerous and much more costly". Report continues to treat the subject in terms of economic logic and climate change is seen as the greatest market failure the world has ever seen, and that it leads to other market imperfections.

"... Action on climate change will also create significant business opportunities, as new markets are created in low-carbon energy technologies and other low-carbon goods and services. These markets could grow to be worth hundreds of billions of dollars each year, and employment in these sectors will expand accordingly. The world does not need to choose between averting climate change and promoting growth and development... Tackling

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<sup>&</sup>lt;sup>3</sup> The roots of green economy concept go back to the report written by Markandya and Barbier in 1989 which is called *Blueprint for a Green Economy* (Turhan and Gündoğan, 2017: 282).

climate change is the pro-growth strategy for the longer term," (Stern, 2006: viii).

With the impact of this report the idea of the necessity for appropriate environment policies to create new investment and employment opportunities, and at the same time to carry out environmental protection has taken its central place in the mainstream economics. These environmental policies bases on taxes, carbon trade and regulation, they are technologically deterministic and individualistic as shown below. They do not take into account main agents of pollution which are multinational corporations.

"... The first is the pricing of carbon, implemented through tax, trading or regulation. The second is policy to support innovation and the deployment of low-carbon technologies. And the third is action to remove barriers to energy efficiency, and to inform, educate and persuade individuals about what they can do to respond to climate change." (Stern, 2006: viii).

This and subsequent reports are written with human centred approach. Nature is seen as "natural capital" and natural functions and processes are treated as services for human use. Hence different facets of nature are quantified and priced to be turned into profitable investments and argued that this will not only generate growth but actually stronger GDP growth. Green Economy, it is claimed, could become a new engine of growth. (Unmüßig, Fatheuer and Fuhr, 2016). All the reports rest on the idea of consistency between growth and green economy and this notion was formulated first in Brutland Report published in 1987, which framed sustainability discourse.

The concept of green economy gained a different dimension with the start of the economic crisis in 2008. The Green New Deal Group in England published a report named "A Green New Deal" (GND) in 2008. According to this report, world has been going through triple crises: Financial, climate and energy crises and this kind of serious situation has not been seen since the 1929 Great Depression. The report bases on two main economic policies. One is extensive transformation of tax system; second is

encouraging renewable energy investments. Low interest rate policy would provide cheap credits for the investors of renewable energy and transportation. These investments would be encouraged also by charging windfall taxes to big petrol and gas companies. GND report carries "green" shades of Keynesian, Institutional and and Neo-classical approaches. As shown below, it is expected drastic changes from the collaboration of market-state and civil society:

"The Green New Deal promotes 'joined-up thinking' about the four systems that dominate our world: The market, the state, civil society and the ecosystem. We hope that it will lay the basis for a radical transformation and renewal of our financial, political and ecosystems." (GND Group, 2008: 6)

State is expected to carry out large scale green/carbon reducing infrastructure investments such as renewable energy and transport by issuing bonds; encourage technological inventions by providing necessary incentives and redirect markets towards climate issue by designing new regulations. State here infact is not exactly interventionist as is the case with Keynesian state. It regulates and leads the market by collaborating with civil society which is called governance. According to this report the main reason of the economic crisis is financial deregulation which has facilitated the creation of almost limitless credit. Hence dominance of financial system on other sectors of the economy should be challenged. Necessity of re-regulation in the financial system is the main difference of this report from the others. However, this argument contradicts with carbon trading which is one of the main policies offered for carbon reduction in the same report. Analysis in terms of increasing effectivness and productivity refers to faster growth which means more production, more energy and resource use and more waste (BUKO, 2012). Underlying idea of this document is still the assumption of consistency between growth and green economy.

Soon after the GND report, UNEP Green Economy Initiative also published a report called *Global Green New Deal* in 2009. When compared with the GND Group's report, together with the emphasis on regulation of national and international financial system, Keynesian tendencies are also

dissapeared in UNEP's report. Otherwise, there are not fundemental differences in the main arguments.

"...In response to the financial and economic crisis, UNEP has called for a "Global Green New Deal" for reviving the global economy and boosting employment while simultaneously accelerating the fight against climate change, environmental degradation and poverty" (UNEP, 2009a: 1).

Investments in energy and transportation technologies are prioritised in the report not only in industrialised world but also in developing countries which have budgetary constraints. Thus, industrialised countries should support these countries financial and in other forms such as technical assistance. UNEP also called each G20 country to invest at least 1 per cent of their total GDP in promoting green economic sectors, to realise clean, sustainable growth while eradicating poverty. There were not any changes in the main theme and green economy policies:

"The Global Green New Deal policy brief also identified the international policy architecture requiring attention: trade, aid, carbon pricing, markets for ecosystem services, development and transfer of technology, and policy coordination" (UNEP, 2009a: 2).

One after another report published in 2008 and 2009 by the international organisations which advocate liberal market economy. Another such report is UNEP 2008 Annual Report (published in 2009) which is written in line with green new deal:

"...The Global Green New Deal and Green Economy Initiative, together they echo to the crises of today and also those looming for tomorrow – from climate change to increasing natural resource scarcity and rapidly degrading ecosystem goods and services. It has several pillars supporting a re-direction and a re-focusing of markets to deliver the wide-ranging transformations so urgently required. These include: improving how we value nature's services; mainstreaming these valuations into national and international accounts; generating employment through green jobs, and laying out policies and market signals that will accelerate a transition to a Green Economy." (UNEP, 2009b: 7).

World Bank in its 2012 report, which is called *Inclusive Green Growth*, argued that environmental protection itself is investment.

"... If the environment is considered as productive capital, it makes sense to invest in it, and environmental policies can be considered as investment." (World Bank, 2012: 34).

According to the report, main reasons of crises are increases in population, inadequate property rights on natural "resources" and natural "services". This prevents investors *reaping* the full return to new ideas:

"...Inefficiency stems partly from the fact that many natural resources are common property, so consumption by one person precludes consumption by another, and it is hard to exclude potential users. Open access regimes for common property create incentives to use up such resources as quickly as possible." (World Bank, 2012: 8).

#### Then the solution is:

"Much of green growth is about good growth policies—addressing market failures and "getting the price right" by introducing environmental taxation, pricing environmental externalities (such as carbon pricing), creating tradable property rights, and reducing inappropriate subsidies." (World Bank, 2012: 12).

All these are called "good green growth" policies. If good growth policies implemented, efficient allocation of resources would be succeeded and ecological problems would be solved by the well functioning price system, which is necessary for the perfectly functioning market economy.

All the policies suggested by the main international institutions base on primarily pricing the natural "assets". OECD's concept of green growth is not very different than the other international institutions':

"...Green growth can be framed in a well-established environment-economic growth...In other words, it is about the economic opportunities arising from

the incentives triggered by the right policies and the right framework conditions. In particular, price signals provide incentives to innovate. And the issue of prices is directly linked to natural asset valuation. A starting point for examining economic opportunities from environmental considerations is by examining the role of 'green industries', trade in 'green products' and creation of 'green jobs'" (OECD, 2011: 27).

### 2. Green Economy and Eradication of Poverty

Another argument of green economy discourse is eradicating poverty. If developing countries adopt low carbon economic policies, which require green growth framework, developed countries promised to support them with financial and technical asistence. To do that they should recognise the full value of natural "capital" as a factor of production along with other commodities and services (OECD, 2012: 10).

"... Choosing not to bring more land under cultivation because of the high environmental costs will be difficult for a country with high levels of rural poverty. Though, options for increasing the productivity of existing cultivated land should be explored. Evidently, systems to pay poor countries for ecosystem services and increase the economic and welfare benefit accruing to them and their citizens from maintaining environmental assets will be critical for the political feasibility of green growth strategies. Emerging evidence has reiterated that green growth activities can offer both short term and longer term benefits and opportunities to developing countries" (OECD, 2012: 10, 11).

As it is seen in these statements development of underdeveloped countries should depend on to the financial and technical assistance from developed countries. If they protect their forests, if they do not cultivate their land and if they do not invest in the industry to reduce carbon emissions, they would get these assistances from the developed world. Until the emergence of green growth discourse, main argument of ortodox growth theories for developing countries was to follow the path that industrial countries went through before. Currently, they recommend not to follow the same path. In both cases development for underdeveloped countries is

depended on financial and technical "assistance" of developed countries. This means that the role assigned to developing countries in the international divison of labour has not changed: Dependant growth to the external resources.

These recommendations also mean that developing countries should bear the brunt of ecological crisis. While multinational companies implement low carbon projects to get carbon permits in these countries only to continue polluting in another parts of the World, these countries do not benefit much from these projects (Lohmann, 2005) and they are the ones which are affected more from the negative effects of climate change as well. First three countries affected most from the climate change in 2019 are Haiti, Phillipines and Pakistan (Eckstein, Hutfils and Winges, 2019). Climate change and so called low carbon policies followed by the developed countries and multinational companies increase poverty instead of reducing it. Climate change limits the agricultural season, affects water sources, increases food prices, leads to food insecurity. Low carbon projects implemented in these countries by the multinational companies mean high profits for themselves from carbon trade; for developing countries it means mono-culture economies, loss of biodiversity, low agricultural production, being source of cheap labour etc. Poverty for the large parts of the world's population is increasing.

According to Oxfam (2019), The gap between the poor and the rich is increasing in the world. Hundreds of millions of people are living in extreme poverty while huge rewards go to those at the very top in 2018. The number of billionaires has doubled since the financial crisis and their fortunes grow by \$2.5bn a day. Meanwhile the wealth of the poorest half of humanity, 3.8 billion people, fell by 11 per cent. According to Oxfam's analysis, 26 people owned the same wealth as the 3.8 billion people who make up the poorest half of humanity in 2018, down from 43 people the year before.

### 3. Indicators of Ecological Crisis

Ecological crisis is deepening since the mid-1980s when sustainabilty and later on green economy discourses started to prevail in the world. One

of the most important indicators of this is level of carbon dioxide (CO2) emissions which is responsable 70 per cent of global warming. The concentration of carbondioxide in the atmosphere has increased from approximately 277 parts per million (ppm) in 1750, to 415.70 ppm on May 15/2019<sup>4</sup>.

Annual Mean Global Carbon Dioxide Growth Rate was 0,70 ppm/year in 1992, when UN Rio Conference on Environment and Development took place. This rate reached to 2,39 ppm/year during second Rio+20 Conference in 2012 and it was 2,48 ppm/year in 2018<sup>5</sup>. According to the International Energy Agency (IEA), instead of reducing emissions, the world emitted a new record 33.1 billion tons of CO2 into the atmosphere in 2018. Energy-related CO2 emissions from the burning of coal, oil and gas increased by 1.7 percent (Mainhardt, 2019: 5). According to the Kyoto Protocol (2005), by 2012 the industrial countries must have reduced their emissions by 5.2 per cent on average compared with 1990 level. They are far from achieving this target though. CO2 emissions in the OECD countries increased by 8-9 per cent over the 1990s (Brunnengraber, 2007).

World Bank while promoting green growth policies, continues supporting fossil fuel investments. Bank gave three times more financial support to fossil fuel projects compare to renewable energy projects (Mainhardt 2019: 13). According to International Monetary Fund (IMF, 2019: 2) when the cost of the damage fossil fuel burning on climate and health is taken into account, global fossil fuel subsidies increased from 4,7 trillion dollars in 2015 to 5,2 trillion dollars in 2017 and coal and petroleum together account for 85 per cent of global subsidies. The new data for 2018 show a one-third increase in the estimated value of global fossil fuel consumption subsidies, to more than \$400 billion<sup>6</sup>, global renewables consumption subsidies do not even reach half of it<sup>7</sup>. According to

<sup>&</sup>lt;sup>4</sup> https://www.earth-syst-sci-data.net/8/605/2016/essd-8-605-2016.pdf; https://www.co2.earth/daily-co2

<sup>&</sup>lt;sup>5</sup> https://www.esrl.noaa.gov/gmd/ccgg/trends/gl gr.html

<sup>&</sup>lt;sup>6</sup> https://www.iea.org/weo/energysubsidies/

 $<sup>^{7}\ \</sup>underline{https://energypost.eu/400bn-in-global-fossil-fuel-consumption-subsidies-twice-that-for-renewables/}$ 

International Institute for Sustainable Development (IISD, 2019: 2) currently around USD 372 billion is spent on producer and consumer fossil fuel subsidies, overshadowing the USD 100 billion in support to renewable energy. Global Status Report (GSR, 2019) also reveals that total investment in renewable energy (not including hydropower) was \$288.9 billion in 2018 — less than fossil fuel subsidies and an 11 percent decrease from 20178. Although there are plenty of data on the subject from different institutions, they all indicate that fossil fuel investments and subsidies still overhelmingly more than those of renewable energy.

In spite of the dominance of green economy discourse, there is not much evidence to show that low carbon growth policies have been implemented. Available data show that there is not serious attempt in the direction of fixing triple crises which are intrinsically related to each other, instead turning crises into profits seems to be the top priority for the main institutions of the system.

#### **CONCLUSION**

Taking into account the reports of international instutions, they diagnose triple intensifying but independent crises in the world especially since 2008 that are economic, ecological and food crises. According to these reports, the solution for all three crises is low carbon green growth which would be realised by implementing green economic policies that includes green technologies, green investments and green finance. International institutions such as UNEP, World Bank and OECD argue that main reason of these crises is increasing population that triggers consumption of world's resources. Transition from brown economy into green economy would be achieved through supporting green technologies and green products by using tax incentives, subsidies and most importantly by carbon markets. To do all these, first of all externalities, common properties and public goods should be priced and property rights should be determined to overcome the market failures. Underlying idea is that crises world has been confronting can be solved by market mechanism;

<sup>8</sup> https://www.ren21.net/gsr-2019/chapters/chapter 01/chapter 01/

unlimited growth, profit maximisation and policies of green economy are not contradictory, hence they can be achived simultaneously. According to mechanistic, techno-managerial logic of these international institutions replacing one set of policy with the other in the framework of market mechanism is sufficient to overcome these multiple crises. Green economic policies would not only fix triple crises, it would also eradicate poverty by opening new investment and job opportunities and by channeling funds to the developing countries. It is supposed to be that harmony of interests among countries.

It is true that discourses of green economy and green growth provide large and profitable investment opportunities for the capital owners who are seeking new profitable investment fields to overcome the bottlenecks capital accumulation has been facing. Nonetheless, it is not population increase which paves the way for crises, but endless growth logic of capitalism. Thus ecological crisis and endless growth are contradictory. Endless growth means accelerated consumption in proportion to increasing capital accumulation. Without questioning prevailing logic of growth and power relations green economy can not provide a sound solution to the ecological crisis. The solution should be sought in radical political transformations which challenge unlimited capital accumulation logic of capitalism rather than replacing one set of techno-managerial policies with another in the framework of the ongoing system.

#### REFERENCES

Bracking, S. (2015). "Performativity in the Green Economy: How Far Does Climate Finance Create Fictive Economy?", **Third World Quarterly**, Vol. 36, No. 12: 2337–2357.

Brunnengraber, A. (2007). "The Political Economy of the Kyoto Protocol", **Socialist Register**, Vo. 43: 213-230.

BUKO (2012). Ten Theses of a Critique of the Green Economy, Bundeskoordination Internationalismus.

http://rio20.net/en/documentos/ten-theses-of-a-critique-of-the-green-economy/, (Erişim:19.08.2019).

Daly, H. (2007). Ecological Economics and Sustainable Development, Selected Essays of Herman Daly, Edward Edgard, Cheltenham ve Northampton.

Eckstein, D., Hutfils, L. and Winges M. (2019). Global Climate Risk Index, Briefing Paper, Berlin: GermanWatch.

<u>file:///E:/financialisation%20of%20nature/Global%20Climate%20Risk%20Index</u>%202019 2.pdf, (Erişim: 27.08.2019).

GND Group (2008). A Green New Deal, <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f">https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a href="https://neweconomics.org/uploads/files/8f737ea195fe56db2f</a> xbm6ihwb1 <a hre

GSR (2019). Global Status Report, Renewables 2019 (REN21). <a href="https://www.ren21.net/wpcontent/uploads/2019/05/gsr">https://www.ren21.net/wpcontent/uploads/2019/05/gsr</a> 2019 full report en.pdf(Erisim: 21.08.2019).

Harvey, D. (1981). The Urban Process Under Capitalism: A Framework for Analysis. In: Michael D., Scott A. S. (Eds.). **Urbanisation and Urban Planning in Capitalist Society**, Methuen Co.&Ltd., London, 116-121.

Harvey, D. (2014). **Seventeen Contradictions and the End of Capitalism,** Oxford University Press, New York.

Harvey, D. (2016). Crisis Theory and the Falling Rate of Profit. In: **The Great Financial Meltdown: Systemic, Conjunctural or Policy Created?**, Turan Subaşat. Cheltenham (Ed.), Edward Elgar Publishing, UK • Northampton, MA, USA, 37-54.

IISD (2019). (International Institute for Sustainable Development, Fossil Fuel to Clean Energy) Subsidy Swaps: How to Pay for an Energy Revolution. Richard Bridle, Shruti Sharma, Mostafa Mostafa, Anna Geddes, <a href="https://www.iisd.org/sites/default/files/publications/fossil-fuel-clean-energy-subsidy-swap.pdf">https://www.iisd.org/sites/default/files/publications/fossil-fuel-clean-energy-subsidy-swap.pdf</a>, (Erişim: 05.09.2019).

IMF (2019). IMF Working Paper, Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates, David Coady, Ian Parry, Nghia-Piotr Le, and Baoping Shang.

https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509, (Erişim: 08.09.2019).

Lohmann L. (2005). "Marketing and Making Carbon Dumps: Commodification, Calculation and Counterfactuals in Climate Change Mitigation". **Science as Culture**, Vol. 14, No. 3: 203-235.

Lohmann L. (2012). "Financialization, Commodification and Carbon: The Contradictions of Neoliberal Climate Policy", **Socialist Register**, Vol.48: 85-107.

Mainhardt, H. (2019). World Bank Group Financial Flows Undermines the Paris Climate Agreement, Urgewald,

https://urgewald.org/sites/default/files/World Bank Fossil Projects WE B.pdf, (Erişim: 11.09.2019).

McAfee K. (1999). "Selling Nature to Save it? Biodiversity and Green Developmentalism". Environment and Planning D: Society and Space, Vol. 17, No. 2: 133–154.

OECD (2011). Towards Green Growth: Monitoring Progress: OECD Indicators, OECD Green Growth Studies, OECD Publishing, <a href="https://www.oecd.org/greengrowth/48224574.pdf">https://www.oecd.org/greengrowth/48224574.pdf</a>, (Erişim: 03.08.2019).

OECD (2012). Green Growth and Developing Countries Consultation Draft. <a href="https://www.oecd.org/dac/greengrowthanddevelopingcountries-consultationdraft.htm">https://www.oecd.org/dac/greengrowthanddevelopingcountries-consultationdraft.htm</a>, (Erişim: 03.08.20199).

Osborne T. (2015). "Tradeoffs in Carbon Commodification: A Political Ecology of Common Property Forest Governance", **Geoforum**, Vol. 67, 64-77.

Oxfam (2019). Public Good or Private Wealth? <a href="https://oxfamilibrary.openrepository.com/bitstream/handle/10546/62059">https://oxfamilibrary.openrepository.com/bitstream/handle/10546/62059</a>

<u>9/bp-public-good-or-private-wealth-210119-summ-en.pdf,</u> (Erişim: 14.09.2019).

Purkis, S. (2019). Is the Green Economy Appropriate Remedy for the World Economic and Ecological Crises? Paper presented in the VII. International Mediterranean Social Sciences Congress, September 10-12, Budapest.

Smith, N. (2007). "Nature as Accumulation Strategy", **Socialist Register**, Vol. 43, 16-36.

Stern, N. (2006). Stern Review: The Economics of Climate Change. <a href="http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview-report-complete.pdf">http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview-report-complete.pdf</a>, (Erişim: 12.07.2019).

Sullivan, S. (2013). "Banking Nature? The Spectacular Financialisation of Environmental Conservation", **Antipode**, Vol.45, No.1: 198-217.

Turhan, E. and Gündoğan A. C. (2017). "The Post-politics of the Green Economy in Turkey: Re-claiming the Future", Journal of Political Ecology, Vol. 24: 200-341.

UNEP (2009a). Global Green New Deal: An Update for the G20 Pittsburgh Summit, UNEP Green Economy Initiative. <a href="http://wedocs.unep.org/handle/20.500.11822/7736">http://wedocs.unep.org/handle/20.500.11822/7736</a>, (Erişim: 11.07.2019).

UNEP (2009b). *UNEP 2008 Annual Report,* <a href="http://wedocs.unep.org/handle/20.500.11822/7742">http://wedocs.unep.org/handle/20.500.11822/7742</a>, (Erişim: 08.07.2019).

Unmüßig, B., Fatheuer T., and Fuhr, L. (2016). The Green Economy as a Way Out of the Global Crisis?, Heinrich Böll Stiftung, The Green Political Foundation.

https://www.boell.de/en/2016/06/27/green-economy-way-out-global-crisis, (Erişim: 03.07.2019).

World Bank (2012). Inclusive Green Growth: The Pathway to Sustainable Development. Washington.

http://siteresources.worldbank.org/EXTSDNET/Resources/Inclusive_Gre			
en Growth May 2012.pdf, (Erişim: 14.07.2019).			