

From A Real Economy to A Green Economy: Is Such a Transition Possible and What Should It Be?

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Abstract

It is no secret that one of the popular terms that is widely used in the public press is the term green economy. However, all we hear about this are opinions, the truth lies in actions. The fact is that we know quite a lot about the content of a real economy and even a green economy, but we practically do not know how to make the transition from one system to another. All statements about the significance and manifestations of the green economy, in most cases, represent the expected or possible consequences of the transition from a real economy to a green economy. However, unfortunately, researchers and, more often than not, politicians and publicists forget that the problem of using the green economy model is not only to move to possible reductions in emissions through the use of “clean” energy in industrial production, transport, etc., but that energy production is still largely provided by hydrocarbon sources. The share of the latter is still high in most countries of the world, and compared to alternative energy sources, such energy production is assessed as more efficient.

Key words: real economy, green economy, energy production, emission reduction, energy sources

Introduction

Existing inequalities within countries and between them were and are the reasons for the emergence and active expansion of socio-economic crises, which, against the backdrop of global environmental problems and, above all, climate change, contributed to the emergence of many risks in the environmental and socio-economic spheres on our planet. In this regard, attempts to find common solutions that would be acceptable both in the economic and environmental spheres, in my opinion, at best can be qualified as humanitarian initiatives that supposedly should solve all existing problems at once, are essentially wishes in modern development countries. At the same time, most of the research in this direction, as can be judged from the available publications, is unfortunately aimed at either intensifying the discussion of problems or preparing recommendations for politicians, i.e. immediate development of solutions and implementation in real life. However, most of the recommendations remain, unfortunately, “raw”. One of the reasons for this situation is the strong desire to combine problems of an environmental and economic nature and to use various opinions and statements as evidence of supposedly already found solutions, namely the transition from a real to a green economy. Apparently, it is assumed that such a transition can provide a solution to all problems, regardless of the nature of their content. But how can such a transition be accomplished? There are practically no answers, except

for proposals for the development and use of innovative technologies in solving the assigned problems, which in itself is true. The only question is, what technologies should be developed and used? There are no technologies that would solve both social, environmental and economic problems. Each of these tasks has its own nature, its own structure and impact on other neighboring areas of interaction. However, people easily believe what they passionately desire.

Turning to the issue of discussions about the strategy for the development of a green economy, I would like to address the following problems, which, it seems to me, can most help clarify the real situation: how to achieve real, and not just gradual technological changes and why, in most cases, the proposed scenarios possible changes and transformations seem uncertain?

So, the green economy is defined as an alternative vision [1, 2020] of growth and development; which can (or rather, perhaps contribute to) generate economic development and improvements in people's lives in ways consistent with improvements in environmental and social well-being. At the same time, we note that

one of the important components of the green economy strategy is to promote the development and implementation of sustainable green technologies. The development of sustainable innovative technologies within the framework of the concept of sustainable development seems important and attractive. In this sense, the sustainable development goals are in fact the fundamental basis for the humanitarian development of main kind on our planet. However, it should not be entrusted with solving specific problems of an economic nature, since not everything in our world can be explained only by the behavior of people and the prevailing way of life. Production and consumption, overcoming inequality, etc. affect not only the economic sphere, which is at times engulfed in crises, but also a crisis of coexistence in general [2, 2023], affecting almost all countries of the world.

In the current conditions, it is believed that the transition to a green economy, defined by the UNDP as low-carbon, resource-efficient and socially inclusive, can be achieved through the use of the Paris Agreement and countries' national climate commitments, or Nationally Determined Contributions (NDC) [3, 2023]. That is, in other words, new elements will be included in an incompletely structured model of economic development, such as a “green” economy, such as reducing emissions, reducing the share of greenhouse gases, etc., which are practically not correlated with the content of economic development indicators. Further, guaranteeing institutional support and ensuring a fair process throughout the implementation process appear to be key conditions for scaling the green economy, especially in emerging and developing countries [4, 2022], which gives grounds for predicting the success of the transition to a green economy.

Materials and Approaches

Over the past decade, it has often been noted that traditional economic models need to be reformed to address the challenges of climate change, biodiversity loss, water scarcity, etc., to provide new approaches or concepts that can simultaneously address key social and economic issues. The approach that has gained the most popularity is the proposal for a transition to a green economy. If we carefully consider the structure of traditional economic systems [5,2023], then, as noted above, the green economy, as an alternative vision, should be defined not so much as an economic model, but as a political vision, decision, approach.

It must be said that there is no internationally agreed upon definition of a “green economy”. There are several sustainable paths for transition to a green economy, but for each individual country, according to its level of development and availability of natural resources, the most appropriate path should be chosen. The transition to a green economy will require efforts at all levels of society, transformation of institutional infrastructure, innovation, investment and the creation of sustainable green technologies for the production of clean energy.

It is clear that the creation and widespread use of “green” technologies in production, processing and reduction of harmful effects on the environment is a set of strategies, programs, measures that need not only approval, but also support at all levels and countries of the world. However, we must remember that the transition to green technologies does not at all mean a transition to a green economy. In this case, all the “explanations” of such a transition, such as strengthening the decarbonization process, reducing production costs associated with reducing emissions and waste, etc., despite the attractiveness of the formulations, require a more responsible and qualified approach.

Results and Discussions

When it comes to the use of alternative or renewable energy sources, there is a certain confrontation between companies producing energy using renewable energy sources and consumers of such energy.

There is a large market for renewable energy and most owners of renewable energy companies are very optimistic that they can succeed with the idea of a green economy gaining popularity. However, the actual state of production and cost of such energy produced using renewable energy sources is not so simple. The reasons for this situation are explained, first of all, by the fact that consumers in practice are not as optimistic as companies using renewable energy sources. Consumers are generally open to negotiations, but when it comes to purchasing, they simply refuse. Consumers end up saving money by not switching to renewable energy sources as opposed to fossil fuels. Consumers end up saving money by not switching to renewable energy sources as opposed to fossil fuels.

It is natural to recognize that any company producing energy using renewable energy sources may fail, which may not be due to the perfection of the technology of production, storage and transmission to consumers, or the high cost of such energy. However, it is completely unacceptable in this case to say that ... *existing energy sources must be completely destroyed so that consumers have no choice but to switch to renewable energy sources ...* [6, 2012]. The author explains such a harsh and incorrect statement by the fact that the demand for renewable energy sources is not too high at present. It seems to me that the problem with the current situation is not only the low awareness of consumers about the negative consequences of using carbon fuel, but also the reluctance to switch to renewable energy to save their own costs.

Let us turn to the facts of the state of development of the “green” economy in some countries. As an example, let us provide information about the incredible volumes of gas imports to China from Russia and the United States. One may get the impression that China's economy will develop exclusively on blue fuel, which is the most environmentally friendly today. However, taking into account the pace of China's economic development, we note that such a leap forward is also associated with the use of fossil fuels, in particular coal, in energy production. In 2022, coal, oil and gas accounted for 92% of China's total energy production [7, 2023]. The growing demand for energy in the country has contributed to the continued growth of coal production for a stable energy supply. At the same time, this does not mean that China is abandoning the path to developing green technologies, actively continuing the sale of technologies, blocks and mechanisms, panels and raw materials for the creation of wind and solar power plants.

It should be noted that failures in the renewable energy sector discourage both producers and consumers of “clean” energy. The reasons for the current situation are both objective, imperfect technologies for production, storage and transmission of energy, and subjective, lack of understanding

of the essence of using green technologies. The situation is also aggravated by the ill-considered actions of the governments of many countries in the transition to a “green” economy, which for a long time, with their “excessive” agility, pushed clean energy consumers away from a useful undertaking. Addressing the environmental, economic and social impacts of climate change and transitioning to a green economy requires governments to make huge changes in all sectors of the country's economy, as well as broad and relentless communication of the importance of such a step to citizens and the entire society. In this regard, governments have a special mission to lead, but success is constrained by economic, political and regulatory obstacles, as well as a lack of national and global leadership. It is necessary stop just speculating and believing in transformations through the green economy, but make and implement active and informed decisions within the framework of sustainable development. Achieving ambitious sustainable development goals requires a bold, whole-of-society approach, backed by long-term government commitment.

An example of the insolvency of the government decisions is the use of policies to penalize the use of fossil fuels in energy production, and the availability of a cheaper alternative in the form of emission-free energy storage. It is expected that the widespread introduction of green technologies in the near future will make production using expensive gas unnecessary and archaic. We are talking primarily about the private sector: houses and condominiums. Such conclusions and proposals, upon closer examination, only indicate the increased politicization of decisions, in which there is practically no room and opportunity for citizens to make their own decisions.

Against this background, a critical situation is revealed in the market for energy sources, including gas imports, due to their sharp rise in price. Without exception, all sources of energy (except nuclear) have risen sharply in price, including gas, oil, as well as wind and solar energy. But the rapid development of technology for chemical production and storage of energy helps solve at least part of the problem, which is why more and more local suppliers of heat and electricity are switching to this method. Gas-fired power plants continue to play a critical role in ensuring energy security, even as the focus shifts towards renewable energy sources. Unfortunately, wind and solar energy are still unable to compete with traditional sources. But an alternative approach to generation may have a chance [8,2023].

The most striking example of the ambiguous situation with the use of alternative energy is the situation with the American company Enviva Inc. The company, founded in 2004, logs forests in the southeastern United States and is the world's largest supplier of wood pellets burned instead of coal

in old power plants for large power plants in the EU, UK, Japan and South Korea for industrial-scale energy production. It turns out that these and other countries are exploiting a scientifically suspect loophole in accounting for carbon emissions from burning forest wood, calling it an "environmental resource." Following failures in wind, solar and hydrogen, Enviva is experiencing catastrophic losses. A former Enviva

manager and whistleblower went public [9, 2023] that the company's green claims were falsified. He also said that Enviva's collapse was largely due to the cheap construction of factories equipped with faulty equipment, as well as large-scale financial miscalculations regarding the cost of purchasing wood. European and Asian countries have relied on Enviva pallets to supply their power plants and meet climate change goals. Certainly, burning wood is a more environmentally friendly type of generation than using coal or fuel oil, but it is still not a “neutral” CO² industry. At the same time, be that as it may, it is officially recognized that although biomass is supposedly a green source, the Enviva company’s experience of its unsuccessful use is added to the troubles that have already happened with all types of renewable energy sources. All this could negatively affect the future of the transition to clean energy production within the framework of the green economy.

Conclusion

Thus, the transition to a “green” economy presupposes the beginning of a different strategy of economic development, based not only and not so much on economic growth, but on a fundamental transformation towards more sustainable methods of production and consumption. Such a transition should contribute to the establishment of a real connection between the economic and environmental systems through the development and widespread introduction of green technologies. In this case, the real challenge and opportunity for the transition to a green economy appears to be overcoming obstacles to the sustainable development of technological change. The main goal of technological change is to create the opportunity to mitigate and further adapt the existing production process, for example, the use of green technologies through alternative energy sources, to the level of scientific and technological achievements in the field of production and consumption in the modern development of countries around the world.

In other words, in addition to technological progress, economic and social adaptation, to achieve sustainable technological change in the production process, solutions to organizational and institutional problems associated with technological change and system innovation are needed. Any new solutions developed must take into account the complex interdependencies between different economic systems, overall market dynamics, and the need for knowledge development and institutional reforms. In this regard, the need for systemic change may be especially relevant in the case of the use of “green” technologies, such as zero-carbon processes in energy-intensive industries and others. To successfully use green technologies, it is necessary to carefully study and understand what type of policies can bring co-benefits to a particular country. To do this, it is necessary to study and use reliable data to show how actions to reduce the impact of climate change and the transition to a green economy can achieve benefits both for the environment and promote economic growth. Therefore, it is necessary to measure the environmental, social and economic impacts of climate policies and investments through transformation into green technologies. The transition to the use of “green” technologies represents a real opportunity for the development of “green” business. Subsequent transformations in this case can lead to a rational redistribution of resources both between and within sectors of the economy. Ultimately, such a transition will act not only as a key factor, but also as a necessary condition for solving modern problems of sustainable economic development and environmental conservation.

References

1. Patrik Söderholm. The green economy transition: the challenges of technological change for sustainability/ *Sustainable Earth* (2020) 3:6 <https://doi.org/10.1186/s42055-020-00029->
2. Bobushev, T.S. *Countdown of Coexisting*. Lambert Academic Publishing, 2023. ISBN 978-620-5-63222-2.
3. NDC Synthesis Report – Published on 14 November 2023.
4. Sangji Lee. Toward a just green economy transition. *OpenEdition Journal*, 2022.
5. Temirbek S. Bobushev. Development of Green Economy: Myth or Real Admiration. *International Journal of Scientific Research and Management*, India, vol.11, issue10, Pages||5211-5215||2023|| DOI: 10.18535/ijstrm/v11i10.em03.
6. Carla Bruni. Reason for the Failure of Renewable Energy Companies. *Renewable Energy World*, 2012.
7. Statista Account. China Energy Production, 2023.

8. Reporter, February, 2023.
9. Reporter, August, 2023.