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**“GREEN” ENERGY AS A FUNDAMENTAL BASIS
FOR A SOCIALLY RESPONSIBLE ECONOMY:**

THE IMPACT OF CONSTRUCTIVE AND DESTRUCTIVE FACTORS

Abstract. In recent years, the world has faced a number of serious environmental and economic problems that require immediate and effective solutions. Global warming, air pollution, depletion of natural resources, and energy dependence on fossil fuels threaten not only the environment but also the sustainable development of human society. In this context, “green” energy is becoming one of the key strategies aimed at overcoming these problems and creating a socially responsible and sustainable economy.

“Green” energy, which includes the use of renewable energy sources such as solar, wind, hydropower and bioenergy, offers environmentally friendly and sustainable ways to generate electricity. It helps to reduce greenhouse gas emissions, conserve natural resources, and improve the quality of life. In addition, green energy stimulates economic growth by creating new jobs and developing innovative technologies.

However, the transition to “green” energy is fraught with a number of obstacles. High investment costs, technological and infrastructure challenges, social resistance, and political instability can slow down the adoption of clean energy sources. It is important to understand and take into account both constructive and destructive factors

affecting the development of “green” energy to successfully address these challenges.

The purpose of this article is to analyze in detail the role of “green” energy as a fundamental basis for a socially responsible economy, as well as to identify and assess the constructive and destructive factors that affect this process. The reasons and significance of the transition to renewable energy sources in the context of global environmental and economic challenges, as well as the contribution of “green” energy to achieving sustainable development goals are discussed.

The article is aimed at specialists, researchers, teachers, postgraduate students and applicants for economic specialties.

Keywords: "green" energy, socially responsible economy, constructive factors, destructive factors, impact.

Introduction. In the modern world, where environmental problems are becoming more and more acute, the transition to “green” energy is becoming increasingly important. Global warming caused by increased greenhouse gas emissions and deteriorating air quality are among the most important challenges facing humanity. The use of fossil fuels, such as oil, coal and natural gas, leads to significant environmental impacts, including air, water and soil pollution.

“Green” energy, which includes renewable energy sources such as solar, wind, and hydropower, is a sustainable alternative to traditional sources. It helps to reduce the negative impact on the environment and reduce dependence on fossil resources. Moreover, the development of “green” energy contributes to the creation of new jobs and stimulates innovation in various sectors of the economy.

Literature review. A large number of scientific works of domestic economists, including Ashikhmina A. [8], Borysiak O. [1], Budanov M. [2], Kuzmin O. [4], Plakhtiy O. [5], Prokhorova V. [6-7], Slyuta A. [8], Stanasiuk N. [4], Ugolkova O. [4], Us V. [7] and many others, are devoted to the study of green energy in the context of a socially responsible economy.

Constructive and destructive factors of the economy have been the subject of research by such scholars as O. Artemiev [3], A. Babichev [9], I. Dudnieva [3], K. Slastianikova [9], Y. Us [9], Y. Yanchak [9], and others.

Formulation of the objectives of the article. The objective of the article is to analyze in detail the role of “green” energy as a fundamental basis for a socially responsible economy.

Summary of the main material and justification of the results. The transition to green energy is closely related to the concept of social responsibility and sustainable development.

Social responsibility of business implies the obligation of the management of a business entity to protect the interests of society [4]. In other words, social responsibility is the need for businesses and government agencies to make decisions that take into account not only the economic, but also the social and environmental consequences of their activities. In this context, “green” energy is an important tool for achieving sustainable development goals, such as improving the quality of life, protecting the environment, and ensuring sustainable economic growth.

Sustainable development involves meeting the current needs of humanity without compromising the ability of future generations to meet their needs. “Green” energy plays a key role in this process, as it provides sustainable and environmentally friendly ways to produce energy. Investing in “green” energy helps to reduce carbon dioxide emissions, conserve natural resources and improve public health by reducing air pollution.

The principles of “green” energy are aimed at creating a sustainable, clean and efficient energy sector and are closely linked to the principles of the circular economy and, as a result, form an effective “green” economy [7].

In summary, the transition to “green” energy is driven by global environmental and economic challenges (Fig. 1).

The main problem today is the limited and uneven distribution of energy resources among countries, the main factor being natural features, which makes alternative energy sources a priority in most countries [8].

The current environmental problems are caused by a number of reasons, including an increase in the concentration of greenhouse gases in the atmosphere

caused by the burning of fossil fuels, which, in turn, manifests itself in the form of rising average annual temperatures, more frequent extreme weather events, melting glaciers and rising sea levels.

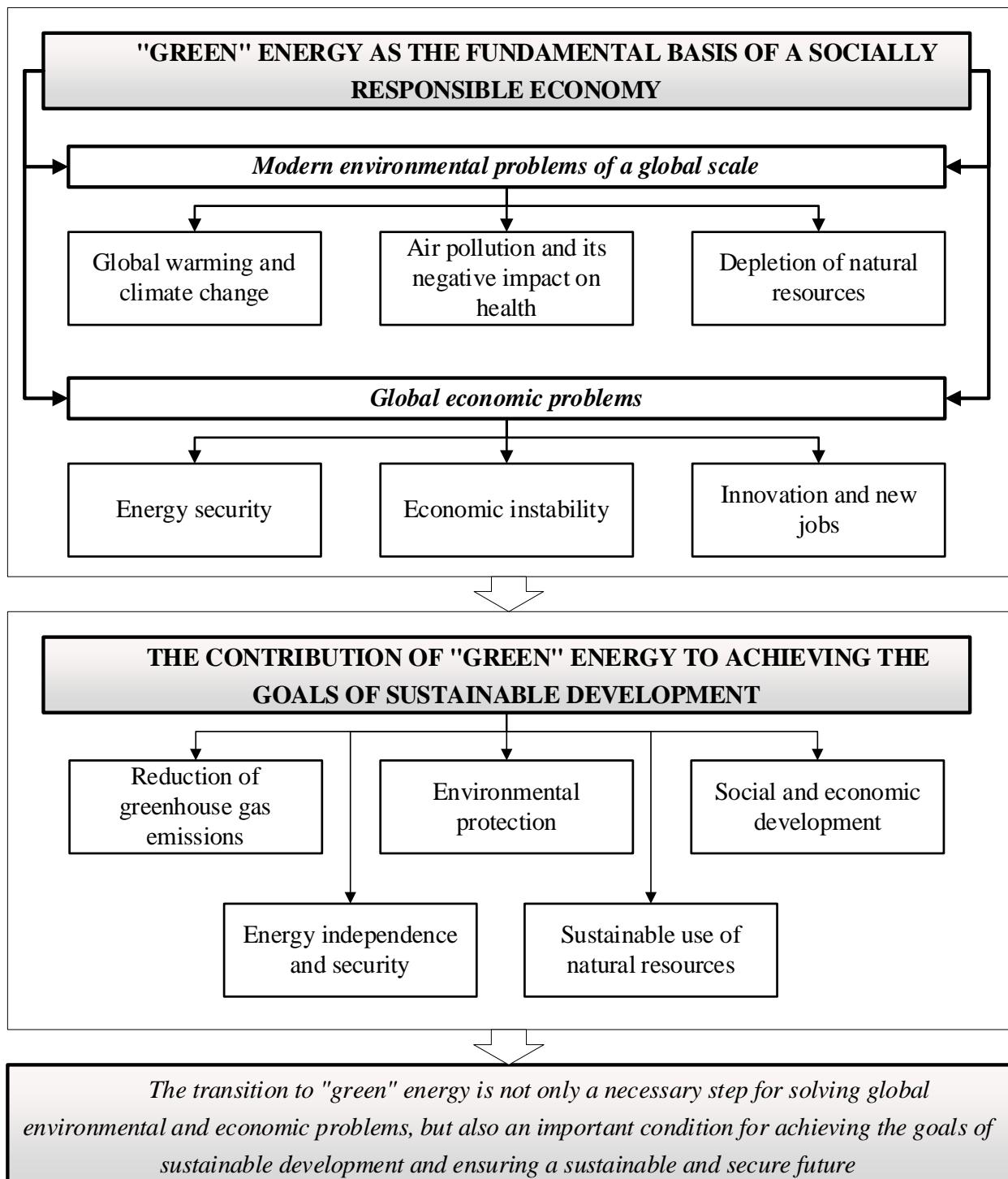


Fig. 1. "Green" energy as a fundamental basis for a socially responsible economy

Traditional energy sources emit harmful substances that worsen air quality and

contribute to the development of respiratory and cardiovascular diseases in humans.

Fossil fuels are limited resources, and their reserves are gradually depleting, which has a negative impact on the country's energy security and stability. The use of energy such as biofuels for the production of goods and services, given the economic nature of raw materials (biomass and waste), is a factor that ensures climate neutrality of the industry and increases its climate resilience [1].

One of the most important factors affecting Ukraine's energy security is the instability of the external context [6]. Dependence on fossil fuel imports makes countries vulnerable to fluctuations in global energy prices and political instability in fuel exporting countries.

Threats to the energy security of power system facilities are short- or long-term events that can destabilize the operation of power facilities, limit or disrupt energy supply, lead to accidents and other negative consequences for the power system [2].

Renewable energy sources (RES), such as solar and wind power, can be produced locally, increasing energy independence and security for countries around the world. RES do not emit carbon dioxide during electricity production, which leads to a reduction in total greenhouse gas emissions and slows global warming.

Fluctuations in oil and gas prices can cause economic crises affecting the global economy. The transition to RES helps to stabilize energy prices and reduce economic risks. The use of RES also reduces dependence on fossil fuel imports and contributes to the energy security of countries, which is especially important for countries with limited reserves of traditional energy resources.

Investing in “green” energy contributes to the development of new technologies and job creation in the renewable energy sector, which stimulates economic growth and supports the transition to a high-tech, socially responsible economy. In addition, investments in “green” energy contribute to job creation and stimulate economic development in underdeveloped regions, which in turn helps to improve living standards.

Infrastructure development, attracting foreign investment, developing

partnerships with foreign companies, developing investment and exports are key factors for stimulating economic growth and supporting entrepreneurship [9].

To summarize, the transition to green energy is an important step towards solving global environmental and economic problems and a crucial condition for achieving sustainable development goals, ensuring a more sustainable and secure future in all spheres of life under the influence of constructive and destructive factors (Fig. 2).

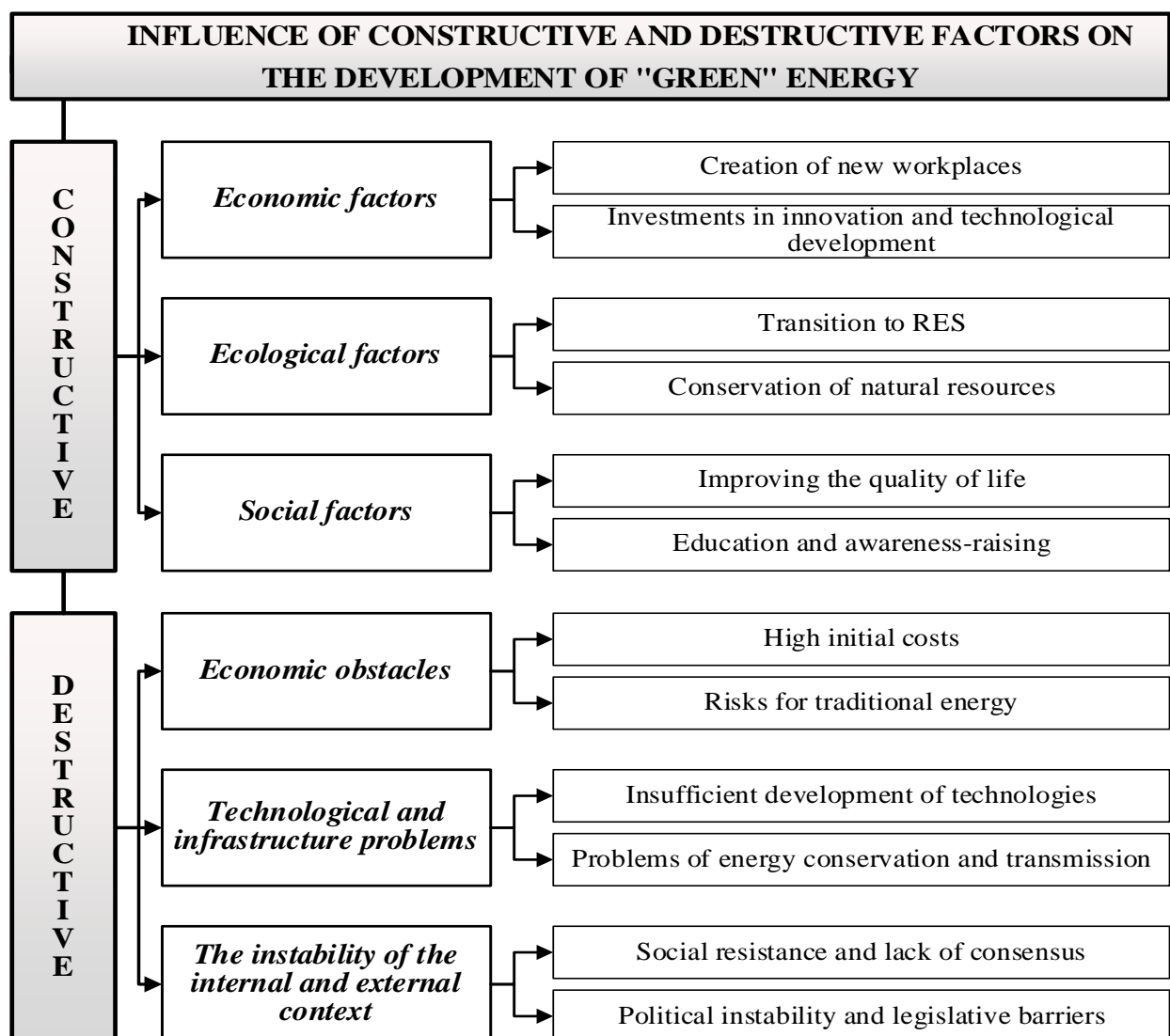


Fig. 2. Influence of constructive and destructive factors on the development of “green” energy

Constructive factors influencing the development of "green" energy include economic, environmental and social factors.

The development of “green” energy contributes to job creation in various sectors, such as the production, installation, and maintenance of renewable energy sources, which is particularly important for regions with high unemployment. In addition, “green” energy stimulates investment in research and development, which leads to the development of more efficient technologies for energy generation and storage, as well as improvements to existing energy infrastructure.

As already mentioned, the transition to RES significantly reduces emissions of carbon dioxide and other greenhouse gases, which plays a key role in the fight against global warming and climate change. In addition, the use of RES helps to preserve limited natural resources, which contributes to environmental sustainability and reduces the burden on ecosystems in the long term.

“Green” energy has a positive impact on the quality of life by reducing air and water pollution, which contributes to improving public health. Therefore, the additional use of environmentally friendly energy sources is promising, and the country has every opportunity to use alternative and unconventional energy sources [5]. In addition, access to clean energy can improve living standards in remote and poor regions. Undoubtedly, the development of “green” energy requires the training of qualified specialists, which stimulates educational programs and raising the level of knowledge in the field of ecology and sustainable development. This contributes to the formation of an environmentally aware society.

Among the destructive factors affecting the development of "green" energy are economic obstacles, technological and infrastructure problems, and instability of the internal and external context.

The construction and installation of renewable energy facilities require significant initial investments, which can be a serious obstacle to their expansion, especially in regions with limited financial resources.

At the same time, the transition to “green” energy may also lead to job losses and closure of enterprises in traditional energy sectors, such as coal mining and oil refining, which is a negative factor due to economic instability.

It is worth noting that renewable energy technologies are still under development and require significant capital and material investments to improve their efficiency and reliability. It is also advisable to pay attention to one of the main problems of “green” energy – dependence on weather conditions and the need for reliable energy storage and transmission systems. The lack of developed infrastructure makes it difficult to integrate RES into existing energy systems.

Finally, in some regions, the population may be skeptical of new technologies and changes in the energy system, which may cause resistance and slow down the process of transition to “green” energy. The defining feature of the functioning of business entities in the current situation is the unconditional dominance of threats to economic security that are of external, exogenous origin, are practically uncontrollable by business structures and have an extremely powerful impact on performance [3]. In addition, political instability and the lack of clear legislation in the field of renewable energy pose serious obstacles to its development, so stable political conditions and government support are needed for the successful implementation of green energy projects.

Conclusion. Therefore, despite existing obstacles, green energy has enormous potential for creating a sustainable and socially responsible society. Achieving this requires the joint efforts of the government, businesses, and society as a whole. Investments in green energy and support for innovative solutions will help overcome existing barriers and ensure a sustainable future for the next generations.

References:

1. Borysiak O. V. Upravlinskyi mekhanizm rozbudovy klimatychnoi polityky na enerhetychnomu rynku : dys. ... d-ra ekon. nauk : 08.00.04. Ternopil, 2023. 509 s.
2. Budanov, M. (2024). Zahrozy enerhetychnii bezpetsi pidpriemstv Ukrainy: metodychnyi aspekt. Adaptivne upravlinnia: teoriia i praktyka. Serii Ekonomika, 18(36). [https://doi.org/10.33296/2707-0654-18\(36\)-08](https://doi.org/10.33296/2707-0654-18(36)-08).
3. Dudnieva, Yu., & Artemiev, O. (2023). Ekonomichna bezpeka subiektiv hospodariuvannia v umovakh permanentnoi kryzy. Adaptivne upravlinnia: teoriia i praktyka. Serii Ekonomika, 17(34). [https://doi.org/10.33296/2707-0654-17\(34\)-09](https://doi.org/10.33296/2707-0654-17(34)-09).

4. Kuzmin O. Ye., Stanasiuk N. S., Uholkova O. Z. Sotsialna vidpovidalnist biznesu: poniattia, typolohiia ta chynnyky formuvannia. Menedzhment ta pidpriemnytstvo v Ukraini: etapy stanovlennia ta problemy rozvytku. 2021. № 2 (6). DOI: <https://doi.org/10.23939/smeu2021.02.056>.
5. Plakhtii O. A. Alternatyvni dzherela enerhii dlia nablyzhennia do enerhetychnoi nezalezhnosti. Liudyna, suspilstvo, komunikatyvni tekhnolohii : materialy Kh Mizhnar. nauk.-prakt. konf. 27-28 zhovtnia 2022r. Vidp.za vypusk N.V.Alieksieienko. – Kharkiv : Machulin, 2022.S. 246-248.
6. Prokhorova, V. (2023). Reformuvannia enerhetychnoho sektoru Ukrainy v konteksti upravlinnia enerhetychnoiu bezpekoiu. Adaptivne upravlinnia: teoriia i praktyka. Seriiia Ekonomika, 15(30). [https://doi.org/10.33296/2707-0654-15\(30\)-03](https://doi.org/10.33296/2707-0654-15(30)-03).
7. Prokhorova, V., & Us, V. (2024). «Zelena» enerhetyka v kontseptsii tsyrkuliarnoi ekonomiky: vidnovlennia ta vykorystannia ponovliuvanykh dzherel u nestabilnykh umovakh. Adaptivne upravlinnia: teoriia i praktyka. Seriiia Ekonomika, 18(36). [https://doi.org/10.33296/2707-0654-18\(36\)-05](https://doi.org/10.33296/2707-0654-18(36)-05).
8. Sliuta A., Ashykhmina A. Vidnovliuvalni dzherela enerhii v enerhetychnii politytsi Ukrainy. Modern directions of scientific research development : Proceedings of the 13th International scientific and practical conference. BoScience Publisher. Chicago, USA. 2022. S. 389-395. URL: <https://sci-conf.com.ua/xiii-mezhdunarodnaya-nauchno-prakticheskaya-konferentsiya-modern-directions-of-scientific-research-development-15-17-iyunya-2022-goda-chikago-ssha-arhiv/>.
9. Us, Yu., Babichev, A., Slastianyukova, K., & Yanchak, Yu. (2023). Instytutsionalni dominanty ekonomichnoho rozvytku Ukrainy. Adaptivne upravlinnia: teoriia i praktyka. Seriiia Ekonomika, 16(32). [https://doi.org/10.33296/2707-0654-16\(32\)-02](https://doi.org/10.33296/2707-0654-16(32)-02).

Список використаної літератури:

1. Борисяк О. В. Управлінський механізм розбудови кліматичної політики на енергетичному ринку : дис. ... д-ра екон. наук : 08.00.04. Тернопіль, 2023. 509 с.
2. Буданов, М. (2024). Загрози енергетичній безпеці підприємств України: методичний аспект. *Адаптивне управління: теорія і практика. Серія Економіка*, 18(36). [https://doi.org/10.33296/2707-0654-18\(36\)-08](https://doi.org/10.33296/2707-0654-18(36)-08).
3. Дуднєва, Ю., & Артем'єв, О. (2023). Економічна безпека суб'єктів господарювання в умовах перманентної кризи. *Адаптивне управління: теорія і практика. Серія Економіка*, 17(34). [https://doi.org/10.33296/2707-0654-17\(34\)-09](https://doi.org/10.33296/2707-0654-17(34)-09).
4. Кузьмін О. Є., Станасюк Н. С., Уголькова О. З. Соціальна відповідальність бізнесу: поняття, типологія та чинники формування. *Менеджмент та підприємництво в Україні: етапи становлення та проблеми розвитку*. 2021. № 2 (6). DOI: <https://doi.org/10.23939/smeu2021.02.056>.
5. Плахтій О. А. Альтернативні джерела енергії для наближення до енергетичної незалежності. *Людина, суспільство, комунікативні технології* :

матеріали X Міжнар. наук.-практ. конф. 27-28 жовтня 2022р. Відп. за випуск Н.В.Алексєєнко. – Харків : Мачулін, 2022. С. 246-248.

6. Прохорова, В. (2023). Реформування енергетичного сектору України в контексті управління енергетичною безпекою. *Адаптивне управління: теорія і практика. Серія Економіка*, 15(30). [https://doi.org/10.33296/2707-0654-15\(30\)-03](https://doi.org/10.33296/2707-0654-15(30)-03).

7. Прохорова, В., & Ус, В. (2024). «Зелена» енергетика в концепції циркулярної економіки: відновлення та використання поновлюваних джерел у нестабільних умовах. *Адаптивне управління: теорія і практика. Серія Економіка*, 18(36). [https://doi.org/10.33296/2707-0654-18\(36\)-05](https://doi.org/10.33296/2707-0654-18(36)-05).

8. Слюта А., Ашихміна А. Відновлювальні джерела енергії в енергетичній політиці України. *Modern directions of scientific research development : Proceedings of the 13th International scientific and practical conference.* BoScience Publisher. Chicago, USA. 2022. С. 389-395. URL: <https://sci-conf.com.ua/xiii-mezhdunarodnaya-nauchno-prakticheskaya-konferentsiya-modern-directions-of-scientific-research-development-15-17-iyunya-2022-goda-chikago-ssha-arhiv/>.

9. Ус, Ю., Бабічев, А., Сластьяникова, К., & Янчак, Ю. (2023). Інституціональні доміанти економічного розвитку України. *Адаптивне управління: теорія і практика. Серія Економіка*, 16(32). [https://doi.org/10.33296/2707-0654-16\(32\)-02](https://doi.org/10.33296/2707-0654-16(32)-02).

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«Зелена» енергетика як фундаментальна основа соціально-відповідальної економіки: вплив конструктивних та деструктивних факторів

Анотація. В останні десятиліття світ зіткнувся з низкою серйозних екологічних та економічних проблем, які потребують термінових та ефективних рішень. Глобальне потепління, забруднення повітря, виснаження природних

ресурсів та енергетична залежність від викопних видів палива ставлять під загрозу не тільки навколишнє середовище, а й сталий розвиток людського суспільства. У цьому контексті «зелена» енергетика стає однією з ключових стратегій, спрямованих на подолання зазначених проблем та створення соціально-відповідальної та сталої економіки.

«Зелена» енергетика, що включає використання відновлюваних джерел енергії, таких як сонячна, вітрова, гідроенергетика і біоенергетика, пропонує екологічно чисті та стійкі способи виробництва електроенергії. Вона сприяє зниженню викидів парникових газів, збереженню природних ресурсів та покращенню якості життя населення. Крім того, «зелена» енергетика стимулює економічне зростання за рахунок створення нових робочих місць та розвитку інноваційних технологій.

Однак, перехід до «зеленої» енергетики пов'язаний із низкою перешкод. Високі початкові витрати, технологічні та інфраструктурні проблеми, соціальний опір та політична нестабільність можуть уповільнити процес впровадження екологічно чистих джерел енергії. Важливо розуміти та враховувати як конструктивні, так і деструктивні фактори, що впливають на розвиток «зеленої» енергетики для успішного вирішення зазначених завдань.

Мета цієї статті полягає у детальному аналізі ролі «зеленої» енергетики як фундаментальної основи соціально-відповідальної економіки, а також у виявленні та оцінці конструктивних та деструктивних факторів, що впливають на цей процес. Розглядаються причини та значущість переходу на відновлювані джерела енергії в контексті глобальних екологічних та економічних викликів, а також внесок «зеленої» енергетики у досягнення цілей сталого розвитку.

Стаття розрахована на фахівців, науковців, викладачів, аспірантів і здобувачів економічних спеціальностей.

Ключові слова: «зелена» енергетика, соціально-відповідальна економіка, конструктивні фактори, деструктивні фактори, вплив.