ECOLOGICAL MARKETING
IN THE PARADIGM OF SUSTAINABLE DEVELOPMENT:
THEORETICAL AND METHODOLOGICAL ASPECT

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Theoretical and methodological approaches to the development of the field of marketing in the information society based on the principles of sustainable development are considered, which is due to the task of creating and maintaining, with the help of marketing, competitive advantages compatible with the tasks of the concept of sustainable development, adapting the marketing orientation of organizations to the needs of sustainable development in order to harmonize interaction «nature-society». It is shown that in the field of marketing, the focus on the concept of sustainable development actualized the formation of the ideology of sustainable marketing and sustainable consumption, a sustainable marketing organization and contributed to the formation of ecological marketing, which focuses on the demonstration of positive social and environmental behavior by companies to ethical consumers, responsibility for environmental safety, life and health consumers. In accordance with Ukraine’s course of integration into the European Union, the economic policy of the state is faced with the task of building the economy based on the principles of sustainable development. The issue of the need to combine the efforts of the state and civil society to implement the concept of sustainable development has been updated. It is indicated that in order to overcome the dominance of resource- and energy-intensive industries and technologies, the raw material orientation of exports that dominates in Ukraine, state policy should consider the achievements of the Fourth Technological Revolution and support science-oriented industries. The role of the achievements of the Fourth Technological Revolution, to solve the problems of sustainable development thanks to technologies of alternative energy production, «smart» technologies for the house, and cloud technologies, which become the basis for calculating the economical distribution of resources and optimal satisfaction of consumer needs, is considered. It is shown that with the efforts of civil society, with a formed environmental consciousness, it is possible to overcome the ideology of consumer society, which led to the global environmental crisis and prevent business from neglecting the requirements for environmental protection, saving capital investments in the ecological sphere.

Key words: global problems, ecological marketing, green economy, sustainable development, Fourth technological revolution.

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Formulation of the problem. The ideology of consumer society, which was formed in the 20th century, when the countries of the West achieved economic prosperity, led to excessive production of consumer goods and services, and, as a result, irrational use of resources, environmental problems, increased social inequality within individual countries and the planet as a whole. It was at this time that a view of marketing as a business philosophy was formed, which is aimed at stimulating unlimited consumer demand, as a result of which it is unable to support sustainable development.

The aggravation of the problem of interaction «nature–society» forces a new look at the task of marketing, from the awareness of responsibility for the fate of the existence of all living things on the planet, which actualizes the formation of the concept of ecological marketing in the paradigm of sustainable development, considering changes in the economic policy of nature use. In the context of the integration of the economy of Ukraine into the world economy, in the field of marketing, the understanding and solution of the problems of forming a policy of balanced nature use in the paradigm of the concept of sustainable development (Sustainable development), which emphasizes the need to establish a balance between meeting the needs of humanity and protecting the environment in the interests of current and future generations, is being updated, preventing deterioration of environmental safety, greening of all production activities, taking into account its consequences at all levels – local, national and international.

The reduction of natural resources, pollution and extensive use of the environment forces business to consider the concept of sustainable development. Before the state and civil society, this actualizes the issue of the formation of society’s eco-awareness in the context of awareness of the interaction «business – ecology», the influence of environmental marketing tools on the consumer choice of various segments of consumers, considering the environmental factor.

Analysis of recent research and publications. The issues of creating the foundations of the national policy of Ukraine in the concept of sustainable development in the

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Works are devoted to issues of environmental management L. Kozhushko, P. Skrypchuk, problems of ecological marketing are investigated by N. Havrylets, N. Dochynets, G. Campo, V. Pride, O. Ferrell, M. Polonski, J. Ottman, N. Zinovchuk, Yu. Lupenko, A. Rashchenko, O. Sadchenko and others. But at the same time, the aspects of the marketing policy of ensuring sustainable development, the problems of accepting environmental and social limitations of the traditional corporate marketing philosophy, which determine this research, remain insufficiently researched.

The purpose of the article. Highlight problems in the field of ecological marketing in Ukraine with the aim of promoting the implementation of its economy in the European economic space. To show that consideration of the principles of sustainable development and the compliance of the technological foundations of business development with environmental standards corresponds to ecological marketing, circular economy, the development of which should be directed by the efforts of the state and business under the control of civil society with a formed ecological consciousness.

Presentation of the main research material. The ecological problems faced by humanity in the last decades of the 20th century actualize the problem of understanding the unity of the social and the natural, harmony between the activities of society and the preservation of the environment, increasing the level of ecological safety of Ukraine, and maximizing the use of ecological marketing opportunities. The high energy intensity of production in Ukraine, environmental problems (depletion of natural resources and pollution of the natural environment, especially in connection with the accident at the Chernobyl NPP), raise the issue of creating effective mechanisms of action joint with European countries for the formation of an ecologically and economically balanced policy of nature use, in particular, joint projects in the field of use of natural energy resources and production without risks of causing irreparable damage to the natural environment. In line with the concept of sustainable development, aimed at radical changes in the economic policy of nature use at the level of the world economy and national economies, in the context of the integration of Ukraine into the European and global economic space, it is important to develop strategies for achieving the goals of sustainable development of the domestic economy and the role of the marketing sphere in the concept of sustainable development.

According to the ecological efficiency index, which is a synthesis of data on the state of sustainable development, based on 40 efficiency indicators in 11 categories of issues, Ukraine in 2022 took 52nd place out of 180 countries presented in the rating, with an index of 49.60. And although this indicator has improved by 6.20 over the past 10 years, most developed countries have significantly better indicators. In particular, the first five places are occupied by Denmark, Great Britain, Finland, Malta, and Sweden [1]. The ecological efficiency index includes indicators of climate change, the state of the environment, the viability of ecosystems, which allows to assess on a national scale how close countries are to the established goals of the environmental policy of sustainable development and how successful they are in moving towards a sustainable future.

The aggravation of environmental problems, the increase in the number of natural disasters, the sharp increase in environmental damage caused the need to increase the costs of sewage treatment plants and the development of environmentally friendly technologies and production processes, and in the field of marketing, the issue of promoting ecological goods and raising the prestige of organic food products labeled «naturalness» was raised. «vito», «bio», «eco», etc., environmental sustainability of the region and environmental technologies, organization of company activities based on the international system of standards, eco-labeling of goods, environmental management, environmental audit, environmental transparency.

Ecological (green) marketing appears as a process of satisfying consumer needs by promoting goods or services that minimize environmental damage at all stages of the product's life cycle, which is produced using the minimum possible amount of natural, including energy, resources. The very concept of «ecological marketing» arose in the 1990s as a result of the contradictions of traditional marketing, when the world community began to raise the issue, however, that the constant increase in production and the ideology of a consumer society led to the deterioration of the quality of the environment, the shortage of natural resources and environmental pollution. These problems actualized the appearance of ecological marketing as an activity that has a minimal negative impact on the environment, society and the economy, and seeks to combine an ecological relationship with the environment (ecological component), fair treatment of employees (social component) and economic success (economic component) as effectively as possible. By embodying the concept of ecological marketing, corporations contribute to the preservation of the environment and try to solve the standard tasks that accompany the implementation of any marketing campaign. This kind of marketing corresponds to the concept of sustainable development. «Contradictions existing in the conditions of the accelerated globalization of the world economic system and the degradation of the natural living environment and depletion of natural resources can be overcome under the condition of the formation and introduction of a fundamentally new policy of balanced nature use, which would meet ecological and
economic criteria and be aimed at ensuring long-term sustainable development», – rightly notes T. Tunytsia [2, p. 183].

Marketing policy should not remain aloof from issues of balanced nature use and should become an integral component of the global economic policy of sustainable development, because it is the protection, rational use and reproduction of the global natural living environment and natural resources that is a key factor in ensuring environmental security.

In the sphere of international trade of Ukraine export of agricultural products and metals are dominant. According to the data of the State Statistics Service of Ukraine for 2021, the first three positions in the export sphere of Ukraine were occupied by: non-precious metals and products from them – 15,992.5 million dollars, (including ferrous metals – 13,951.3 million dollars); products of plant origin – 22.8% of the total volume (15,538.3 million dollars), including grain crops – 18.1% (12,343.9 million dollars); fats and oils of animal or vegetable origin – 10.3% (7037.3 million dollars). The production of branches that are oriented towards the processing industry and knowledge-intensive production occupies a much smaller volume, compared to the import of raw materials. In particular: machines, equipment and mechanisms; electrical equipment – 7% ($117.5 million); products of chemical and related industries 4.1% (2,816.4 million dollars); means of land transport, aircraft, floating vehicles – 1.0% (89.4 million dollars); industrial goods – 1.8% (124.9 million dollars) [3]. These data characterize the country's export structure as having a raw material orientation. Problems of non-destructive use of the natural living environment and long-term, inexhaustible use of natural resources are associated with such a structure. These issues should become a priority in the formation of state policy regarding the promotion of the timely reproduction of the quality of ecological systems, natural resources and the observance of balanced nature management.

The dominance of the extensive model of economic development, resource- and energy-intensive technologies, and raw material orientation of exports in Ukraine actualizes the problems of environmental safety related to environmental pollution, depletion of mineral, forest and water resources, processing of landfills and household waste. Their solution should be based on the country's sustainable development strategy, which will contribute to the growth of people's well-being, without leading to the deterioration of their living environment and the degradation of natural systems. This strategy is an alternative to the paradigm of economic growth, which ignores environmental problems and is based on an extensive model of economic development.

In the field of marketing, orientation towards the concept of sustainable development should be aimed at the formation of ecological and socially responsible marketing. Environmental marketing focuses on the demonstration by companies to ethical consumers of the principle of corporate social responsibility and is a means of demonstrating positive social and environmental behavior, which aims to show that the company is responsible for environmental safety, life and health of consumers. This concept of marketing is embodied by those companies that focus attention on the environmental benefits of their product, commitment to the principles of sustainable development and social responsibility, and put «emphasis on how products are created and produced» [4, p. 119].

In order to stimulate the production of goods and services that meet ecological safety standards for the environment and the consumer, eco–labeling of goods and services has been introduced. The principles, methods and requirements for eco-labeling are established by international standards of the ISO 14020 series «Ecological labeling and declarations».

Ecolabels are divided into two types by meaning. The first type indicates the competitive advantage of the object of environmental certification regarding its impact on the state of the environment and human health during the life cycle and consists of phrases indicating the advantage; environmental certificate number; the sign of ecological labeling, which is a guide for the consumer to safer products and products with better ecological characteristics. The right to use it is granted by the environmental labeling authority, based on the results of the assessment, based on the environmental certificate.

II type of labeling informs about the product's impact on the environment (compostable; degradable; demountable structure; reduced energy consumption; reduced use of resources; reduced water consumption; suitable for reuse). Such labeling belongs to self-declarations, that is, statements that do not require certification.

The implementation of the sustainable development strategy is served by the achievements of the Fourth Technological Revolution, which allow simulating business processes simultaneously in virtual and physical reality, which will allow to quickly find optimal solutions; to carry out horizontal and vertical system integration, which allows to combine in a single information space all management systems and participants at both the micro and macro levels; industrial Internet of things; to provide additional (additive) production, in particular three-dimensional printing [5, p. 8].

Achievements of the Fourth Technological Revolution provide the opportunity for production to adapt to new, individual needs of consumers, when each product can be made to individual order; provide alternative energy production technologies, «smart» technologies for the home and body condition monitoring. Cloud technologies become the basis for calculating the economical distribution of resources and optimal satisfaction of consumer needs, that is, they become the basis for the connection between marketing policy and ensuring sustainable development.

Based on the latest inventions and developments of the Fourth Technological Revolution, the circular economy is becoming a reality, aimed at energy conservation, regenerative environmentally friendly production and consumption, and green growth (Green Growth). The main
tools of the circular economy are ecological innovations and «green» (environmentally clean) technologies and technologies for processing secondary raw materials or completely waste-free production cycles. This sets the task for ecological marketing «to learn to work according to new schemes: from the selection of raw materials, methods of product development and new concepts of service to the wide use of by-products of one production as a full-fledged raw material for another» [6, p. 43].

Business, guided by the concept of Green Growth, when designing and implementing new types of activities, must consider the ecological component in order to avoid negative impact on the environment, significant savings of energy and non–renewable resources. The technologies of the Internet of things and «smart» houses, which are based on the use of renewable energy sources, combined with the reduction of energy consumption, allow to significantly reduce greenhouse gas emissions, contributing to the reduction of the greenhouse effect in the atmosphere and climate change.

Since only a small part of the business will be able to quickly adapt to the requirements of the circular economy, it is necessary to introduce public control over compliance with environmental regulations at the level of regions and cities. In the conditions of decentralization, the government together with communities, should take over the processes of financing scientific research designed to create new business models and product samples, where the need for multiple use and further processing of goods will be considered from the beginning. A positive example of such cooperation between state bodies and civil society is the experience of the EU, USA, Canada, China, and Singapore [5, p. 25].

The concept of «green economy» is based on the separation of economic growth from the use and consumption of natural resources and energy; creating more added value with less impact on the environment. Its goals are to increase the well-being of society while significantly reducing waste, harmful emissions, water and soil pollution. But only the technologies of the Fourth Technological Revolution are not enough for the economical use of natural resources. A change in public consciousness is needed is the formation of environmental consciousness, which will change both business strategies and the ideology of the consumer society, which is built on the principle: «Earn more and spend more». Business development presents civil society with the task of «building and implementing the idea of harmonizing social relations and a model of future eco-civilization in the context of implementing the concept of sustainable development on the basis of the step-by-step activities of the world community in modern socio-economic and political conditions» [7].

The consumer society, formed by the mass media in the second half of the 20th century, built a society according to certain patterns of life, standardizing people's behavior, styles, fashion, without considering social differences, geographical place of residence, family and religious affiliation. In the consumer society, a new type of person is being formed is «homo economicus». Typical for such a society is an externally oriented personality, whose behavior is determined not by traditions and principles, but by various influences, a system of connections, fashion, and authoritarian bureaucracy. Mass production, mass consumption, mass culture, desires stimulate consumer demand, which makes us think, facing the global problems, about the correlation between material overproduction and the spiritual regression of man and humanity in general. The world community’s awareness that the ideology of consumer society has led to man-made environmental pollution and a global ecological crisis forces the field of marketing to actualize the problem of environmental awareness, without which it is impossible to implement the concept of ecological marketing and «green» business.

The concept of «green» business is based on three components – the three R’s: reduce, reuse, recycle [8, p. 69]. Reduce is focus your efforts on reducing the consumption of electricity, heat, water, paper and other material resources; reuse is the rule of reusing consumables; recycle is proper disposal of waste (separate collection of garbage, return of waste paper, disposal of office equipment and batteries, etc.).

The circular economy, which is based on the frugal use of things (tools, clothing intended for one-time events, tourist equipment, household appliances, cars), etc., corresponds to this concept. Therefore, the marketing strategy includes the ideas of «sharing economy» or «collaborative economy» [5, p. 29], an example of which is the car sharing startups Zipcar, Buzzcar, GoLoco and Veniam, started in the USA by Robin Chans). Also inherent in the circular economy is the concept of returning goods, after their consumption, to the production cycle, where they are recycled again (an example is the activity of the car manufacturer Renault, which collects used engines, gearboxes and fuel pumps and provides the same guarantee after the repair, but they cost much cheaper).

In order to popularize the circular economy, an international non–profit organization was created in 2010 – the Ellen MacArthur Foundation (EMF) [9], whose goal is to find new ways of doing business and develop new, more advanced products. Members of this fund are Black Rock, Danone, Google, IKEA, Philips, Unilever, L’Oreal, Nestle, PepsiCo, The Coca-Cola Company, Walmart, Amazon, Cisco Systems, Enel, Ford, Heineken and others who adhere to the idea of economics closed loop. The foundation focuses its efforts on such projects as plastic pollution, food, fashion, finance, the city.

The Foundation, in cooperation with the UN Environment Program, has united more than 500 organizations that cooperate with the goal of creating a closed cycle for the production of plastic. Driven by the goal of combating plastic pollution, the companies, which account for 20% of the world's production of plastic packaging, have committed to abandon the use of plastic packaging wherever possible by 2025; implement innovations that will ensure the safe reuse of plastic where it cannot be
dispensed with; its reprocessing or composting; plastic packaging should not contain dangerous chemical compounds [9].

Industrial accidents in recent decades (in India, in Chernobyl, on the drilling platform of the BP company in the Gulf of Mexico in the USA) served as a reason to attract attention to environmentally dangerous activities [10]. The negative impact on ecosystems, causing damage to such sectors of the economy as agriculture, fishing, and tourism served as an impetus for the entire world community, raising questions about the need for strict compliance with environmental standards and the formation of environmental awareness.

Ukraine’s join to the circle of European countries requires compliance with International environmental legislation and environmental management standards, in particular ISO 14000, due attention to investing in renewable energy sources; waste processing; funding of scientific research that would ensure low-carbon production, zero CO2 emissions (carbon neutrality).

In the field of marketing, the strategy is to ensure the adaptation of the national system of technical regulation to the norms of the EU technical regulations, to simplify certification procedures, to create a network of interregional mobile laboratories to confirm the conformity of the quality of goods and to resolve controversial issues regarding their quality level, to ensure the appropriate labeling of goods.

**Conclusions.** In the field of marketing, the strategy of sustainable development sets the task of focusing not only on maximizing the profits of corporations and shareholders due to effective management of resources and the development of competitiveness, meeting the needs of customers, but also promoting the economical use of resources and compliance with environmental safety standards. Achieving these tasks will be facilitated by a focus on ecological marketing using the achievements of the Fourth Technological Revolution, which allows the use of information and the development of digital marketing channels to ensure sustainable development through the frugal use of non-renewable resources. The technologies of the Fourth Industrial Revolution allow the production of ecological goods and services under the condition of economical use of all types of resources, energy in particular.

Availability of market information for marketing makes it possible to reduce inappropriate use of resources and more reasonably set development goals and develop the marketing policy of corporations. Civil society should not only exercise control over the activities of the state and business in relation to environmental safety, but also contribute to the formation of environmental awareness, a rational attitude of consumers to needs and an understanding of the subjectivity of well-being factors.

In the field of marketing, the concept of sustainable development is based on the symbiosis of economic, environmental and social factors. The ecological orientation of marketing, aimed at ensuring sustainable development, corporate social responsibility, and careful treatment of resources, is a promising direction for its development in modern conditions, when environmental problems are intensifying, which requires both the state and civil society to pay attention to this problem. The transition to a model of sustainable development also has an ethical meaning, as it requires a change in value orientations inherent in a consumer society, awareness of human dependence on nature at the current stage of civilizational development, and the formation of needs based on rationalism.

In Ukraine, where the economy is dominated by resource- and energy-intensive industries and technologies, the raw material orientation of exports and the excessive concentration of production in industrial regions, the high level of environmental pollution by mining, metallurgical, chemical industry and energy sector enterprises, on the way to European integration and the desire to join to the circle of developed countries, it is necessary to develop a strategy of structural reforms that would change the inefficient and environmentally dangerous structure of production. This is possible on the basis of focusing on science-intensive industries in compliance with the legislation in the field of ecology and the concept of sustainable development, which will ensure balanced nature use, non-destructive and tireless use of natural resources, protection and timely reproduction of the environment.

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Механізм регулювання економіки


СПИСОК ВИКОРИСТАНИХ ДЖЕРЕЛ:

ЕКОЛОГІЧНИЙ МАРКЕТИНГ У ПАРАДИГМІ СТАЛОГО РОЗВИТКУ: ТЕОРЕТИКО-МЕТОДОЛОГІЧНИЙ АСПЕКТ

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Розглянуто теоретико-методологічні підходи до розбудови сфери маркетингу в інформаційному суспільстві на принципах сталого розвитку, що обумовлено завданням створення і підтримки, за допомогою маркетингу, конкурентних переваг усіх економічних активістів, включно з усіма його секторами. Це завдання поставлено в розумінні, що глобалізація економіки змінює не лише напрямки і темпи розвитку економіки, але й вимагає нових методологічних і теоретичних підходів до його управління. В основу теоретико-методологічних підходів до розбудови сфери маркетингу в інформаційному суспільстві на принципах сталого розвитку покладено основні прийоми, які визначають його стратегічні напрямки.

Ключові слова: глобалізація, сталий розвиток, концепція сталого маркетингу, стале споживання, сталій маркетинг.

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