

## **THE PARADIGM OF ENVIRONMENTAL RESPONSIBILITY OF PARTICIPANTS IN THE LOGISTICS PROCESS**

*Analysis of the existing logistic concept shows that in order to create a global network structure in which it is possible to minimize the negative human impact on the natural environment, it is necessary to justify the transition to a new paradigm of logistic knowledge.*

*Moving to a new paradigm is a natural evolutionary process associated not only with the accumulation of knowledge about the world around us, but also the development of new technologies, as well as the awareness of changing perceptions in a particular historical period.*

*At present, it is legitimate to note the actual transition to the next paradigm of logistics, which can be designated as the environmental responsibility of all participants in economic activity and consumption of goods and services. This is due, firstly, to the limited resources in the world, and secondly, to the need to use recycling – the reuse of resources in supply chains (this is the most important prerequisite in the development of the environmental paradigm).*

*Thus, in this article we will analyze the transition to the environmental responsibility paradigm and the main reasons for its emergence. In particular, our research and conclusions will focus on Belarus and neighboring countries.*

**Keywords:** *ecological paradigm, environmental problems, logistics activities, atmospheric pollution, responsibility of participants*

Logistics processes are an integral part of the activities of any enterprise operating in the global economy. The deepening of the processes of globalization of the world economy objectively actualizes the problem of improving measures to protect the environment. Particular interest in the greening of logistics operations on the part of companies is caused by an increase in environmental literacy and consumer awareness, as well as the growing importance of economic factors in maintaining the environment, political influence and regulation within this area.

Particular attention in the practice of business structures is the correct behavior in relation to the environment, including the implementation of logistics functions, the implementation of which should be carried out using resource-saving technologies and environmental assessment of the impact of resource processing processes on the environment. This is also explained by the fact that logistics is responsible for the movement of material flows along the market chain through transportation, warehousing, cargo consolidation operations and thus has close contacts with the environment.

The dynamic development of business and the genesis of logistics activities make it a priority to apply the logistics concept of shared responsibility, which involves achieving the maximum ratio between the company's benefits and the costs of organizing logistics by taking into account not only the features of the economic environment, but also other components of activity, including environmental ones.

The economic component ensures the achievement of quantitative economic indicators of the functioning of market entities by optimizing logistics costs. The social component forms the conditions for safe production, distribution and use of manufactured products. The environmental component contributes to the improvement and improvement of the ecological climate, reducing the anthropogenic impact of logistics activities in environmental processes.

The integration basis that ensures the consolidation unity of the interaction of the noted components is resource-saving technologies aimed at saving all types of resources while maintaining high product quality and minimizing the amount of waste and emissions into the environment.

Currently, logistics is a fairly young science. Logistics, in our opinion, in modern conditions is a means of achieving the strategic purpose of enterprises as a result of the coordination of flow processes.

The entire stage of development of the logistics concept was associated with the development of subsystems for the movement of materials and related flows in the field of transportation of material products. At the same time, the ecological aspect should be considered in a broad sense as maintaining the preservation of the entire natural environment for both humans and flora and fauna.

It should be noted that there is no systematic consideration of the problem of environmentally sound logistics activities, which is manifested in the absence of a unitary approach to methodological provisions reflecting the substantive aspects of logistics in the transition to economic development on the path of a green economy [1]. At the moment, logistics has two ways of follow-up. The first is a gradual transition to environmentally responsible activities, the second is the continuation of irresponsible activities, taking into account the irreparable damage to the environment. At the moment, research and finance are sufficient for the organization of low-waste industries, which means that in the near future the use of logistics principles should lead to the creation of waste-free industries and a comfortable habitat not only for humans, but also for flora and fauna objects.

At the moment, we can note the actual transition to the paradigm of environmental responsibility of the logistics sector, which can be designated as the environmental responsibility of all participants in logistics activities. This is a consequence of the fact that, firstly, we have a limited amount of global resources, and secondly, there is a need to reuse resources in supply chains, which is an essential prerequisite for the development of the ecological paradigm. The transition to a new paradigm is a natural process due to the development associated with the accumulation of knowledge about the world around us, the development of new technologies.

Today, one of the main environmental problems is the problem of low air cleanliness, especially in large cities. In post-Soviet Belarus, a private car fleet has grown by an order of magnitude, and already its use has adversely affected the level of air cleanliness, especially in large cities. No serious, tangible responsibility for this has been borne, for example, by any major entrepreneur in the fields of auto export, vehicle operation, etc. In the conditions of the state's ruin and impoverishment of the majority of the population, gasification of residential and industrial sectors was suspended, which led to an additional increase in harmful emissions into the atmosphere.

It should also be mentioned that, looking from the point of view of a market economy, the introduction of technologies for cleaning emissions at enterprises is an additional burden on the part of finance, but in this regard, one should be guided not by the interest of commercial organizations, but by responsibility to the state of the natural environment surrounding us, wild flora and fauna, whose safety can affect people's lives.

As already mentioned, nowadays there is an acute issue of increased atmospheric pollution, 60% of which falls on vehicles, which are one of the main material bases of production links between sections of the logistics chain. To eliminate this problem, a set of measures is already being used to ensure the movement of materials during any production processes up to their transformation into goods and production waste, followed by bringing the latter to recycling or safe storage in the environment, called environmental logistics [2]. The main principles of environmental logistics include: rational use of natural resources, as well as rational use of enterprise resources, maximum use of containers and packaging of production, both reuse and their environmentally safe disposal, the introduction of innovations and technologies to reduce the environmental burden on the environment, and at the same time, and increase environmental education and the responsibility of personnel and, not least, environmentally safe transportation and storage of material resources.

Speaking of transport, since transport is currently the main cause of the polluted environment, many organizations are trying to make it as safe as possible for the environment. This trend can be considered by the example of the leading manufacturer of ground-based urban electric transport, namely BKM HOLDING, which produces and promotes to the CIS market a model of the Vitovt Truck electro prime

electric truck created in Belarus. BKM HOLDING company in Belarus, conducting socially responsible business, supports and develops initiatives related to environmental protection. The main advantage of this vehicle is that it does not produce harmful emissions into the atmosphere [4].

Over time, the flow of marketable products inevitably transforms into a waste stream, so the main objects that environmental logistics is aimed at are: waste and pollution. Because of this, the return and disposal of waste is necessary to solve environmental problems, since waste occupies vast territories, poisoning the soil and water, turning into one of the main problems of our time, which can be solved by environmental logistics [3].

In conclusion, we should analyze the above. A consistent change in the logistics paradigm occurred due to the improvement of the collection and processing of information at various stages of the development of the logistics concept. The prospects for the development of logistics should be related to covering operations focused on environmental components. Currently, a transition to the paradigm of environmental responsibility of all participants in logistics activities is expected. According to experts, the use of environmental principles will lead to a reduction in logistics business processes carried out in logistics systems. Processes such as those related to the delivery of materials to final products, as well as from recycling and waste disposal, will turn into processes that are environmentally friendly for people and the environment. Also, the introduction of the environmental aspect in the management of supply flows has a high significance and relevance. Currently, there is a trend towards the development of this area of logistics, since logistics in general is relevant and in demand at present in our country and abroad.

### References

1. *Евтодиева, Т. Е.* Зеленая логистика как составляющая концепции общей ответственности / Т. Е. Евтодиева // Вестн. ЮУрГУ. Сер. Экономика и менеджмент. – 2018. – Т. 12, № 1. – С. 167–174.
2. *Григорьев, М. Н.* Логистика : учеб. для бакалавров / М. Н. Григорьев, С. А. Уваров. – 4-е изд., испр. и доп. – М. : Юрайт, 2014. – 836 с.
3. Основные направления развития логистики XXI века: ресурсосбережение, энергетика и экология / И. Н. Омельченко [и др.] // Гуманит. вестн. – 2013. – № 10 (12). – С. 1–10.
4. Электрогрузовик [Электронный ресурс] // BKM HOLDING. – Режим доступа: <https://holdingbkm.com/catalog/elektrogruzovik>. – Дата доступа: 20.10.2022.