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The Impact of Transport on the Environment

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The environment in the modern world takes an important part of any field of activity. However, it is worth noting that most people don't realize how great their impact on the environment is. Transport is one of the biggest factors of environmental pollution. Transportation has made and continues to make its print on various components of the environment.

Harmful substances that have been developing due to the action of transport, in general, consist of gases emitted from the exhaust systems of cars, trains and ships. They move through the air. These are nitrogen oxides, sulfur dioxide, carbon dioxide, metals, as well as organic compounds (volatile, including some toxic, persistent, biologically accumulated). There are five types of transport, such as road, rail, sea, river and air transport.

As an example, we can cite the damage that is caused by the river mode of transport. Vital activity in rivers and other inland waters is destroyed by escape of hazardous substances. The rivers along which the main communication routes pass have already died in many areas.

The marine type of transport is dominant in world trade and accounts for more than 70% of world trade. Until the emergence of tankers in the maritime sphere, it did not create a danger of huge environmental losses. Due to the increase in demand for crude oil and petroleum products, there was an unexpected demand for powerful tankers, the tonnage of which varies from hundreds to several thousand tons. The marine type of transport is dominant. A huge amount of oil, oils and other dangerous

substances penetrate into the aquatic environment, due to which the ecosystem is uncorrectable damaged. Oil spills are one of the main causes of the disappearance of most different species of marine plants and animals.

Environmental scientists have proved in their scientific works that there are approximately 15 million different types of pollutants that are produced by vehicles, most of which have not been studied to a greater extent.

The degree of pollution in cities is mainly affected by the organization of automobile traffic, as well as the technical condition of transport. Since the number of motor vehicles is growing at a high rate and roads are not being built at such rate, resulting in traffic jams that increase emissions of carbon monoxide, nitrogen oxides, hydrocarbons, lead compounds and soot. With the participation of nitrogen and hydrocarbons, ozone occurs under the influence of solar radiation. Road transport is the least environmentally friendly of all types of transport that are used in cities. The negative impact of vehicles on the environment is primarily due to the increase in air, water, soil and vegetation pollution caused by them.

As for rail transport, its harmful effects are less than while using road transport. However, diesel locomotives with diesel power plants have a negative effect on the atmosphere, since hydrocarbons, carbon oxides, sulfur, nitrogen, and various solid pollutants are present in the exhaust gases. It is also worth noting that large areas are allocated for rail transport and due to this, the level of environmental impact is equated to the degree of influence by road transport. Railway transport carries out noise pollution of the environment. The spheres that serve this type of transport, such as metallurgy, chemical industry and many others have an impact on the biosphere.

Air transport is quite popular at the moment. The air type of transport allows to reduce the time to deliver to the required point. However, this type of transport is one of the main causes of the

greenhouse effect and the disappearance of the ozone layer. At an altitude of several thousand meters, air pollution persists in the stratosphere for a long period of time and thus has an irreversible result for the environment. If we consider this issue from the side of the amount of fuel that is burned in one hour of air transport flight, it becomes obvious how much the atmosphere suffers from a huge number of hazardous substances [1].

Many transport companies are constantly looking for different ways to reduce the impact on the environment. For example, in several organizations, vehicles are being improved and updated by replacing them with cars that contain more environmentally reliable engines or replacing them with vehicles that create less noise. Also, different types of parts for vehicles, trailers are being designed and created, which would reduce the amount of fuel consumed.

Logistics is a large area, and considering it in the direction of ecology, it is worth paying attention not only to reducing environmental pollution by means of transport, but also to its accompanying components.

One of the items found for the implementation of measures aimed at reducing the impact is packaging. A significant direction of "green logistics" is expedient, environmentally friendly packaging. There is currently a practice of packing a product that matches its size, without leaving unnecessary free space. Such a solution not only reduces the amount of transport for transportation, but due to the extra free space, it is possible to fill it with other goods, which is also an economically advantageous solution.

It is also necessary to note the great influence of warehouse storage planning. Correct planning reduces the degree of negative impact on the world around us. Enterprises are investing large financial resources in the re-equipment of warehouses, providing them with modern technologies that will be aimed at increasing the degree of storage conditions for special cargoes, increasing the

degree of safety, ensuring that the environment is not in danger of harm. Storage facilities are provided with energy-saving, cooling and ventilation systems. This is a good solution not only for the environment, but also for the economy of the enterprise. Currently, the directions that involve careful attitude to the degree of consumption are especially developing. Replacing various components of the space with resource-saving ones in the future will reduce financial waste [2].

Transport and ecology have a close relationship, since transport has a direct impact on the environment, and on the contrary. Vehicles are an integral part of any field of human activity. Without them, cargo transportation from one point to another could not be carried out, however, vehicles in most cases have a negative connotation in relation to the environment. The negative impact of transport can't be completely eradicated, but the degree of influence can be reduced. In the modern world, there are and continue to be invented new ways to implement the ideas of reducing environmental pollution.

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