

ECO-FRIENDLY BIOFULES IN LOGISTICS

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Biofuels created on the basis of organic components – ethanol, Flex-Fuel, biodiesel, biogas – are practically a full-fledged alternative to gasoline or diesel, but are produced from renewable natural resources. Plants, agricultural waste, even human waste can become the basis for biofuels. It can be used both together with gasoline (E85 mixture) and separately.

One of the main disadvantages of biofuel is that the vehicle continues to emit CO₂, so the emission will not be zero. Although such emissions do not violate the carbon balance of the planet, they are compensated by the absorption of carbon dioxide by plants that are used in the production of fuel.

But in order to meet the fuel needs during a mass transition, a large amount of biomass will be required, and problems may arise here: huge land resources are needed for growing raw materials – corn, cane, potatoes. For example, ethanol production is now established in Brazil, but in order to grow sugar cane, which is necessary for its production, trees had to be cut down in the Amazon forests, and this is a severe blow to the ecosystem.

The biggest advantage of the "biological alternative" over diesel or gasoline is the fact that the use of biofuels does not require a restructuring of the infrastructure or a serious modification of the entire structure of the car. Bioethanol, for example, can be burned in engines with a higher compression ratio, which opens up new prospects for the development of production technology: more economical and more powerful engines can be created.

At the same time, carbon neutrality is achieved through production, but not operation. That is, in a global sense, it contributes to decarbonization, but does not solve the problem of gas pollution in cities, and, therefore, does not make the quality of life of an individual better.