ASSESSMENT OF THE IMPACT OF ROAD TRANSPORT ON THE CONDITION OF THE ENVIRONMENT Sakun A.O., Polova A.A., Bohatyr D.O. National Technical University «Kharkiv Polytechnic Institute», Kharkiv

The impact of road transport on the environment is very significant, since transport acts as the main consumer of energy and burns most of the world's oil. In the transport sector, road transport is the largest source of global warming.

Other environmental consequences of the use of automobile transport include traffic jams and automobile sprawl, which can occupy natural habitats and agricultural land. Reducing automobile emissions worldwide will have a significant positive impact on air quality, reducing acid rain, smog, and climate change. The impact of automobile exhaust on human health also causes concern. Oxides of carbon and nitrogen, hydrocarbons, compounds containing sulfur – this is the dangerous "cocktail" that we drink every day on the streets of our city. Automobile noise is also harmful to humans – it affects not only hearing, but also the development of hypertension, stomach ulcers, and diabetes.

Pollution by road transport leads to the appearance of short- and long-term effects on the environment. As a result of automobile exhaust, a wide range of gases and solid substances are released, the impact of which leads to the intensification of global warming and acid rain. Engine noise and fuel spills also lead to pollution.

- Pollution by road transport has an impact in several directions:
- global warming:
- air, water and soil pollution;
- impact on human health.

When operating a car with internal combustion engines, the following are the sources of emissions of harmful substances: exhaust gases; crankcase gases; evaporation from power systems; uncontrolled spillage of operational materials on the ground. There is a large amount of lead in the exhaust gases of cars, which, together with salts of other metals, enters the soil, surface and groundwater and is absorbed by plants, which are then used and consumed by humans.

Car exhaust contains various greenhouse gases, such as carbon monoxide and nitrogen oxide. These gases have the ability to block the sun's rays, which are reflected from the Earth's surface. This solar energy enters the Earth's atmosphere and causes deviations in temperature. This is one of the main factors of global warming. Using complex climate models, the Intergovernmental Panel on Climate Change predicts that the global average surface temperature will rise from 1.4 °C to 5.8 °C by the end of 2100.