

occur. It is need to reduce heat loss when people pass through the front doors, it is recommended to equip all door panels with closers. These are levers that return the door to a closed state without human participation. Thanks to them, you will not encounter a situation when someone forgot to close the door to the house or entrance. In addition, the closers will eliminate the noise when slamming the sash. It is recommended to use double doors or make vestibules. This way you can protect yourself from heat loss and heat penetration into the room. In this case, an air layer is formed between the two doors, which is also a heat insulator.

In the next two or three decades, at the junction of the periods of exhaustion of traditional and insufficient development of new energy sources, there will be a deficit of energy resources and their sharp rise in price, and the task of saving energy resources will become a priority. New technical solutions are constantly appearing on the market to reduce energy consumption, increase energy efficiency of buildings, and save on energy use. The use of energy-saving technologies during construction will give you the opportunity to significantly reduce the cost of maintaining houses, buildings and structures right now.

1. “ ” [-].- 2011.- : <https://energo-audit.com/>. - :
- 11.11.2011.
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VEHICLE EXHAUST GASES AS AN ENERGY RESOURCE

The number of non-renewable resources decreases during human exploitation. There's a chance to exhaust their reserves in a few decades. Humanity, un-

derstanding this prospect, is looking for different ways to save the resources used or replace them with something that people have more than enough.

Recycling comes to mind first of all, but that is too trivial an idea. What if we use the vehicles exhaust? In 2015, about 1.2 billion cars were operated in the world, 95% of which were passenger cars. In present the number of operated cars has increased, but the percentage remains the same. In this way the "resource" we need always will be enough [4].

The idea is that this enterprise will be localized right on the road. Not blocking traffic, of course. This is a kind of "dome" under the roof of which the pipes will be located. The exhaust gases of cars with the help of a compressor will get into these pipes, and they will be transported to the power plant. At the power plant, exhaust gases are directly directed to the gas turbine, driving it. The energy generated by the rotation of the gas turbine is sent to the generator. This way we will get electricity from the exhaust gases of cars. Also, exhaust gases can be used to heat water then the water will turn into steam. And the steam will rotate the gas turbine as in a conventional power plant with combined-cycle plants. Then one part of the received energy will go to the generator, and the other part will go into the environment [2].

A ventilation system will also be introduced to avoid the greenhouse effect inside the "dome". Thus, any discomfort for motorists passing through this area is eliminated. The recycling building itself will be located by the road next to the "dome", if the surrounding area allows it (meaning a sufficient area of vacant land, unoccupied by forests and farmland). Otherwise, it will be necessary to lay the pipeline system to the place where it is permissible to install the recycling station. Such a station will be local; it could provide energy to a nearby town, village or enterprise.

In addition to working on such a system, it is necessary to think about the design of the "dome" itself. Over time, its gray and boring appearance with a bunch of pipes will begin to depress motorists, so it's worth decorating the station. But not just to decorate, but to give meaning. At the entrance, the dome will turn from black to gray. This "dark zone" represents exhaust gases of cars, which are harmful to the environment. This is followed by the "neutral zone", which will be white. This zone represents the beginning of the process. Next is the "recycling zone" – the light, pale, pastel colors that represent the process of converting exhaust gases into energy. And the "final zone" of bright colors that represent the energy received. Given the two-way traffic, the dome will be divided in half and painted in the above manner in the direction of vehicular traffic.

Zones can be supplemented with various graffiti and cartoons, which will correspond to the theme of each of them. For example, in the "dark zone" depict a city and people in the smoke of exhaust gases and in the "final zone" a clean

city full of energy and joyful people. With this design solution, we take care of people's psychological perception of the object. On the one hand, it is just a decoration of the station, so as not to depress the daily life of motorists. Funny drawings and lots of bright colors can attract children's attention and teach them from an early age to take care of the world around them, to protect nature and use resources wisely. This project is just an idea, the relevance of which is currently overdue. This solves the problem of getting rid of harmful emissions from vehicles and obtaining environmentally friendly energy.

1. [unclear] : - , 2013. - 366 . [unclear]
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RENEWABLE ENERGY SOURCES IN BELARUS AND THEIR ASSESSMENT

Biomass is the most abundant renewable energy resource in the country. Much biomass potential lies in wood resources, including residues, given the vast expanses of forests covering approximately 40% of the country's surface