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TIRE RECYCLING IN BELARUS AND THE CIS COUNTRIES

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Recycling tires is one of the most pressing challenges posed by the global automotive industry to modern mankind. The dynamic growth of the number of vehicles in developed countries leads to a constant accumulation of waste tires. Modern production is focused not only on the production itself, but also the preservation of the environment, as well as eco-mission feedstock.

The fact that the bulk of waster tires stockpiled, including those developed spontaneously leads to the following main negative consequences:

- Adverse ecological situation in the areas of landfills;
- Release of toxic substances in fire;
- Inefficient use of resources;
- Violation of international environmental standards.

In addition, Article 15.63 "Belarus Code of Administrative Offences" №194-3 from 21.04.2003 year. It provided for the imposition of an administrative fine for violation of waste management legislation:

- on citizens in the amount of 5 to 50 "basic units";
- on the SP 200 "basic units";
- for legal entities up to 1,000 "basic units";

This state of affairs is due to the lack of an organized system of collecting tire wastes. More than half of waste tires generated in the private sector. In this case an ordinary motorist is not ready to take on the costs of transporting tires in the reception point for their further utilization. Operating the processing enterprises mainly work with raw materials coming from legal entities (fleets, tire service, car service, etc.). The main consumers of discarded tires we are undertaking "Krasnoselskstroymaterialy" and Belarusian Cement Plant in Kostiukovichi on which tires are used as fuel. Recycling of tires is also engaged in private enterprise "Ecological Alternative" in Grodno. It is clear that they cannot cope with the entire volume of this type of waste, which the country has more than 65 thousand tons. According to Leonid Litskevich, General Director of JSC "Brestoblresursy" (the enterprise - the main procurer of tires in the Brest region), to take the rubber recycling, rather than simply take to the dump, you need to pay 450 thousand Br for the delivered ton. This money goes to the maintenance and upkeep of the temporary storage sites tires, tires transportation to the place of disposal, and these plants are transferred free bus. Despite the problems of national importance tire recycling, government regulation and funding of this issue is not enough. It is also a clear need in the construction of the Belarusian special plants for the disposal of used tires. Such plants are already operating in Greece and Italy. It is expected that the plant will process about 20 thousand tons of tires a year, the rubber crumb is produced from steel cord – purified high-alloy steel, textiles - pellets. Although the rubber crumb in our country is not widely used, but in great demand in Europe and Russia. In many European countries utilize almost 100% of the old rubber. This occurs as follows. Manufacturers and importers of tires produce permanent benefits, funds from which are used for processing of worn tires. In Russia, we decided to practice a different model, which is considered promising. Reception points are likely to be placed on the car repair. After passing the recycling of tires and their payment will be sent for processing. Technology for processing of old tires is quite simple. It is first cooled and then blown to give small lumps, which are then ground into crumb. The resulting chips are used to repair asphalt, everything playgrounds, roof decking, etc. In general, the idea of recycling old rubber is very correct. After all, for the manufacture of most of the tires used synthetic rubber derived from oil. Correct disposal and recycling of old tires will improve the environmental and economic situation, as it will disappear from the landfill "avtohlama" and will develop resource-saving technologies.

The use of used tires, in addition to containing a rubber technical properties which are close to the original, a large number of reinforcing textile and metal materials, is a source of saving natural resources.

In addition, the elimination of landfill waste tires will free for the intended use large areas of land occupied by them.

In order to successfully address the problem of reuse and recycling of used tires in Belarus is necessary to develop and adopt a set of measures governing the procedure for their accounting, collection, storage and delivery for processing, preparation and promotion at the federal and regional legislation, stimulating an increase in the volume of repair and recycling used tires. also requires the creation of a market of products and materials produced from the resultant with recycling. Such work is already underway for a long time in the United States

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and Western European countries, with the active assistance of the World Association of recyclers of tires (ITRA) and ETRA.

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