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WORLD EXPERIENCE IN MUNICIPAL SOLID WASTE RECYCLING

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The lack of a well-functioning collection system is the main difficulty in the field of solid waste recycling in Belarus. In recent years, the problems of ecology and environmental pollution have been raised all over the world, so borrowing foreign experience and adapting it to domestic realities would be reasonable in the context of our time.

Keywords: municipal solid waste, organization of processing, utilization, secondary raw materials.

In the 21st century, one of the most pressing problems is the problem of waste accumulation. The study and analysis of foreign experience in recycling allows us to draw the following conclusions: the waste problem becomes one of the most important tasks facing humanity, and its solution requires careful, balanced and versatile approaches with the participation of many interested parties. First of all, these are municipal authorities, representative bodies, controlling institutions, public organizations, mass media, and heads of enterprises. The implementation of any development programs is impossible without the active participation of the citizens, therefore, city authorities, public organizations and other interested parties should carry out focused work to inform and involve the citizens in the waste management process. A more preferable separation option is the implementation of this process by the residents themselves, rather than the creation of specialized enterprises for these tasks. Even with the effective organization of secondary resources recycling, at present some of the waste remains, it is disposed of in landfills or incinerated. For successful waste management, the experience, mechanisms and technologies of foreign countries should be taken into account. Educational work with the population is also important [1].

The greatest success in the field of waste recycling was achieved by the Swedes. For Sweden today, recycling is the priority. Swedish households collect newspapers, plastic, metal, glass, electrical appliances, light bulbs and batteries separately. Further, all the obtained raw materials are recycled, used again or used for the production of fertilizers. In this country, 30 power plants operate on waste, burning 5.5 million tons per year. The remaining ash, which is 15 % of the initial weight of the waste, is sorted and sent for recycling. Residues are sieved to make another economical move and to extract the gravel that is used in road construction. At the output, 1 % of the waste goes to landfill. The smoke from incinerators consists of 99,9 percent non-toxic carbon dioxide and water, but they are still filtered through a dry filter and water. Once the Swedes wanted to make their country not only clean, but also independent in terms of energy, and they succeeded in both directions [2].

The problem of municipal solid waste didn't sidestep Belarus, although, as statistics show, the situation is generally favorable. So, for example, in 2017, 650 thousand tons of secondary resources from household waste were collected - this figure has doubled over the past 7 years. Cullet is a valuable raw material for the Grodno and Gomel glass factories, waste paper – for factories in Slonim, Dobrush, Chashniki. Although the separate collection program has recently appeared in our country, the results of its work are already visible. In 2018, the amount of municipal solid waste in Belarus amounted to 3,7 million tons, compared to 4 million tons in 2017. The extraction level increased from 17 to 19,2%, moreover, 97 % of unauthorized landfills were eliminated. Today, Belarus plans to eliminate the dangerous burial sites of pesticides under the program for the destruction of persistent organic pollutants until 2028.

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