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## **TOPICAL ISSUES OF TORFS PRODUCTION IN THE REPUBLIC OF BELARUS**

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Stable and sustainable development of society is impossible without the rational use of local natural resources. At present, the leadership of the Republic of Belarus has set the task of replacing at least 25% of imported energy resources with local raw materials. Peat is one of the important fuel and energy resources in ensuring the solution of the task. In the bowels of the Republic of Belarus there are significant resources of peat: the total area of the peat fund is 2.4 million hectares with geological reserves of peat 4 billion tons. Peat reserves in the Republic of Belarus are distributed throughout the country. The state program "Peat" provides for an increase in its production for fuel purposes by 2020 to 4.38 million tons. However, all peat resources in the country are allocated to trust funds: land, environmental, developed, spare, unused. Over 40% of the total

peat fund was allocated to land and environmental funds, and about 4% to the developed fund. Existing technologies of peat extraction require the use of a large set of energy-saturated machines for drainage, preparation, repair of production areas, technological equipment for the production of peat products and transportation to the consumer. As a result of burning fuel in the engines of cars, a large amount of harmful substances is emitted into the atmosphere. Peat deposits, being labile natural ecosystems, require a special approach to their development and appropriate environmentally balanced technologies. The results of calculations showed that the least amount of harmful substances resulting from the combustion of fuel in engine engines is thrown away when the milling process for the production of peat products. The more work done while transporting peat to the pile, the greater the fuel consumption per 1 ton of peat extracted, and, therefore, the emissions of harmful substances into the atmosphere increase. From the point of view of reducing the energy intensity of production of 1 ton of peat products and reducing harmful emissions, the promising technology is the production of milling peat with separate harvesting from stackable rolls using peat machines for peat harvesting.

Currently, the use of peat in the Republic of Belarus prioritized is the agricultural use of peat. Peat extraction for this direction is carried out by the peat enterprises of the Beltopgaz concern, as well as by the Belagroservis RA Ministry of Agriculture and Food. At the same time, the production of Belagroservis regional subdivisions is expected to be carried out in small areas: 10 sites of large and medium peat deposits with a total area of 705 hectares are planned to be developed in the Vitebsk region. When choosing peat extraction technology for small-scale production, it is necessary to strive to ensure high quality of work with minimal expenditure of funds and labor per unit of work. This is

possible by replacing technologies using single-unit aggregates for universally-combined ones, which will reduce the number of machines and reduce investment by 1.5-2 times. To date, the market for peat equipment is represented by Amkodor in the form of high-performance specialized machines for milling peat extraction operations. Their use is justified only in large peat enterprises. Meanwhile, the wheeled front loader Amkodor 342R-01, which is the only machine for loading peat in the absence of loading cranes, can be used for stacking peat. Wheel loaders have a high speed of movement, small dimensions and great maneuverability, versatility of use. Preliminary calculations show the possibility of organizing peat extraction in small areas on the basis of the machine-technological scheme with the use of the front loader Amkodor 342R-01. In the technological cycle, operations will be performed for loosening the peat deposit with a disc grubber, tedding with the same unit and cleaning together with stacking of the loader.

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**СТРАТЕГИИ УПРАВЛЕНИЯ КОНВЕЙЕРНЫМИ  
ЛИНИЯМИ ГОРНОДОБЫВАЮЩЕГО  
ПРЕДПРИЯТИЯ ДЛЯ СТАБИЛИЗАЦИИ КАЧЕСТВА  
ДОБЫВАЕМОЙ РУДЫ**

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Рассмотрена задача поиска оптимальной стратегии управления горнодобывающим комплексом с точки зрения минимизации функции расхождения планового и