A PROMISING RAW MATERIAL BASE FOR THE PRODUCTION OF SYNTHETIC LIQUID FUELS FROM UKRAINIAN COAL

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The article considers the issue of raw materials for the production of synthetic liquid fuels from coal, which is relevant for Ukraine, which has relatively small oil deposits, but fossil coal reserves reach 50 billion tones. It is shown that the coal raw material base for industrial production of synthetic motor fuel in Ukraine should be based on low-metamorphosed coal of B, D, DG and G grades, which prevails in existing geological deposits and is characterized by proper reactivity due to the high oxygen content in the organic mass and the presence of reactive oxygen-containing groups: hydroxyl –OH, carbonyl =C=O and carboxyl –SOC. Due to the systemic crisis in Ukrainian coal industry, there are currently no free resources of raw materials to support new production. This necessitates the restoration or creation of new coal production facilities in the main industrial regions of Ukraine. To create them in eastern Ukraine, it is advisable to base the raw material base of the process on long-burning coal from the Lozova district of western Donbas. To ensure the raw material base for production in the regions of the Centre, it is necessary to restore the coal mining enterprises of the Dnipro lignite basin, primarily the Kostiantynivskyi mine, on a new technical basis. The raw material base for industrial production of synthetic motor fuels from coal in the Western region can be secured by completing the development of the design industrial capacity of Novovolynsk mine No. 9 or by developing the coal of the Tyaglivske deposit. The final choice of the option should be made based on the results of additional feasibility studies.

Keywords: low-metamorphosed coal, synthetic motor fuel, Lozova coal-bearing area of Western Donbas, Dnipro lignite basin, Tyaglivske deposit.

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