STATUS AND PROSPECTS OF THE USE OF BIOGAS PLANTS BY AGRICULTURAL CONSUMERS.

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Висвітлено стан, напрямки та техніко-економічні показники біометанових установок в Україні.

Biomass energy has taken an important place in the energy balance of many countries. For example, in the EU, 14% of the total energy demand is annually obtained from biomass [1].

In May 2024, the Government of Ukraine adopted a Law that allows trade in biomethane and opens up new opportunities for the development of bioenergy. According to the UABIO, today three biomethane plants with a total capacity of 11 million m3/year are operating in Ukraine (Fig. 1), and another 7 biomethane plants with a total capacity of 111 million m3/year are in the process of being launched.

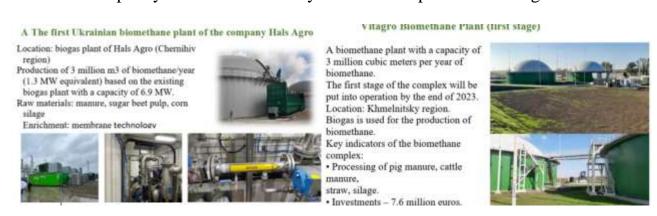


Fig. 1. Operating biomethane plants in Ukraine

According to research by the UABIO association, the average cost of biomethane on the European market is about 900 euros/1000 m3, which, with the cost of biomethane of about 500 euros/1000 m3, provides an optimistic level of profitability of up to 28%.

The technical and economic indicators of biomethane plants depend on many factors [2], depending on which the cost of biomethane can vary from 300 to 1100 €/1000 m3. It is worth noting that Ukraine has its own gas storage facilities and gas transportation and storage capacities, and therefore can create worthy competition at the European level.

List of references

- 1. Dudnikov S, Miroshnyk O, Kovalyshyn S, Ptashnyk V, Mudryk K, Methodological aspects of evaluating the effectiveness of using local energy systems with renewable sources, E3S Web of Conferences 154, 07013
- 2. Serhii Dudnikov, Oleksandr Miroshnyk, Oleksandr Moroz, Oleksandr Savchenko, Iryna Trunova and Volodymyr Pazy, Substantiation of Algorithms of Functioning of the Combined Power Supply System with Renewable Sources, Easy Chair Preprint № 6745.