

PRIORITIES OF EFFICIENT PRODUCTION OF SOLID BIOFUEL IN UKRAINE: REGIONAL ASPECTS

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The main dynamic trends of the global bioenergy is to reduce overall energy costs, increase use of renewable energy sources and the use of mostly solid biofuel. The process of plant biomass use for energy purposes from economic point of view saves energy, from environmental – causes the reduction of environmental pollution, social – allows creating new processing plants, causing the growth of employment. Due to the given advantages of solid biofuel raises the need to increase the rate of its consumption in the regions of Ukraine, reducing the use of coal in the energy structure of the state.

In our country the process of consumption of fuel briquettes and granules only begins. Thus, more than a third of regions with low (up to 1000 tons) consumption, another third of regions is characterized by medium (1100 to 5000 tons) consumption levels and only in three areas it accounts for high (5100 to 10000 tons) and very high (more than 10000 tons) consumption of solid biofuel.

In different regions of Ukraine there is a very uneven process of coal consumption. The vast majority of regions is characterized by its low (up to 100000 tons) and medium (101000-1000000 tons) consumption levels that together constitutes

2431400 tons or 3.6% of total consumption. The share of regions with high levels (1001000-3000000 tons) of consumption accounts for 8346400 tons (12.5%) and only four areas of our country are with very high (more than 3000000 tons) of coal consumption, which in total is 55984500 tons or 83.9%.

The situation indicates that the regions of Ukraine are with low- and middle coal consumption, even with high (given that it share accounted for 12.5%) and to stabilize their energy supply it is necessary to use alternative energy sources, in particular firewood and solid biofuel (pellets and briquettes).

The results give grounds to assert the need for development of industrial production of fuel briquettes and granules in 7 socio-economic regions that will completely give up their consumption of coal. This process must be achieved through the construction of plants of different capacities, including indicators of coal consumption in every socio-economic region. Rated power plants must be such that not only achieve a zero balance for the consumption of coal, but also ensure the future growth of the share of domestic consumption of solid biofuel, while keeping capacities to enter external perspective bioenergy markets.