THE SMALL ENERGY INDUSTRY OF UKRAINE Tiutiunyk L.I., Motovilnik A.V. National Technical University «Kharkiv Polytechnic Institute», Kharkiv

The small energy industry of Ukraine includes industrial thermal power plants and boiler houses, all the equipment of municipal energy, district boiler houses, industrial furnaces, household power plants of various capacities, autonomous heating plants. They are primarily characterized by a low level of economy, reliability and safety, particularly environmental. Small power industry consumes more than 60% of all fuel of the fuel and energy complex of Ukraine. The volumes of organic fuel consumption are 49.2%, respectively. In Ukraine, there are more than 2 million units of fuel combustion plants that belong to the small power industry.. Special attention is paid to the equipment of small power generation industrial thermal power plants. The technical and economic indicators of most of the mentioned industrial thermal power plants are very low, and the negative impact on the environment is very significant. The largest consumers of fuel are also industrial production and heating boiler houses. Therefore, more primary energy resources are spent on the needs of power generating systems of heat supply of small energy than on any other branch of the national economy. The efficiency of fuel use and environmental indicators of these heat supply systems do not always meet the modern requirements of scientific and technological progress. There are a large number of low-efficiency boilers and autonomous heat generators that burn the scarcest types of fuel. All sources of heat production are not only the largest consumers of primary energy resources, but also sources of environmental pollution, they increase the environmental burden on cities and settlements. In economic and ecological terms, the most advanced thermal power plants and large district boiler houses. However, their use is economically justified only in the presence of large centralized consumers. The need for extensive and expensive heating networks significantly reduces the efficiency of the thermal power plant and the scale of their use. The energy strategy of Ukraine envisages increasing the energy the efficiency of energy supply and energy consumption, to reduce the harmful impact of energy on the environment, to increase the efficiency of energy units and installations, replacing old ones with new models, implementing advanced energy technologies.