

DEVELOPMENT OF RENEWABLE ENERGETICS IN THE REPUBLIC OF BELARUS

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The Republic of Belarus does not have sufficient primary energy sources and is heavily dependent on oil and gas imports, mainly from the Russian Federation. Imports of fuel and energy are around 85% of the total consumption of primary energy resources [1].

These factors determine the key principles of the state energy policy: ensuring energy security through improving the fuel and energy mix in parallel with the rational use of energy resources, increased use of local fuels and renewable energy sources (RES) and promotion of energy efficient and environmentally friendly clean technologies in all sectors of the economy [2].

During last 15 years GDP of Belarus increases by 158%, with increasing of Gross Consumption of Fuel and Energy Resources (GCFER) by at about 18%. As a result decreasing of and GDP Energy Intensity by 46% [1] was achieved.

From 2000–2012, the share of RES consumption in gross energy consumption and in the boiler and furnace fuel mix equaled 1.8% and 3.8%, respectively (fig.1).

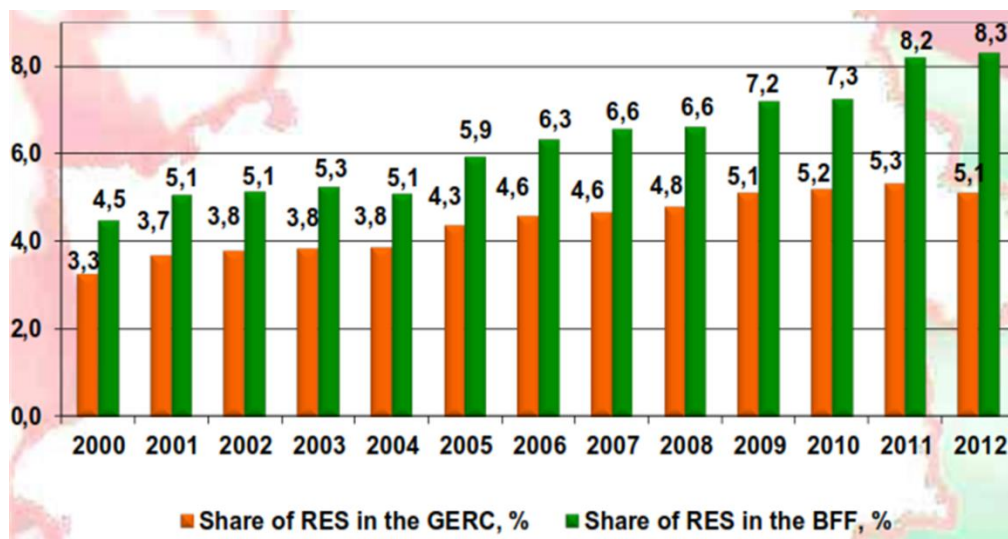


Fig.1. Consumption of RES in gross energy consumption and in the fuel and energy mix for heat and electricity generation [1]

Biomass, biogas, municipal waste, wind and hydro energy are the main RES that are currently economically feasible for use in Belarus. As it can be see from fig.2 main input in renewable energy deployment in Belarus is connected with biomass.

Strategic documents which determine the energy policy of Belarus and the state programmes highlight the importance of RES and local energy sources development for the security of the energy supply. In 2015, due to the increasing use of local fuels and RES, the share of domestic energy resources in the boiler and furnace fuel mix should not be less than 30%, and in 2020 not less than 32%.

The National Programme of Local and Renewable Energy Sources Development for 2011–2015 summarized and specified all programme documents on local fuels and RES use and set forth areas of activities and indicated the specific measures required to achieve the necessary results. The programme will provide for an increase in the use of local energy, including RES, which should reach 7% by 2015 (fig.3).

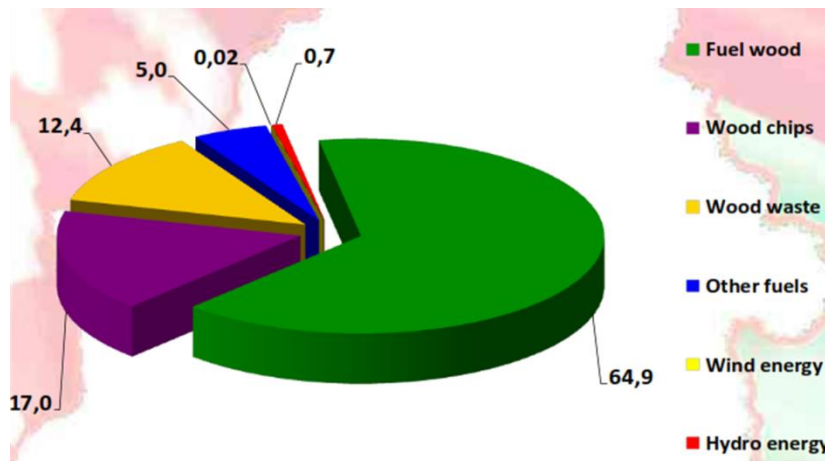


Fig.2. Balance of RES in Belarus, 2012 [1]

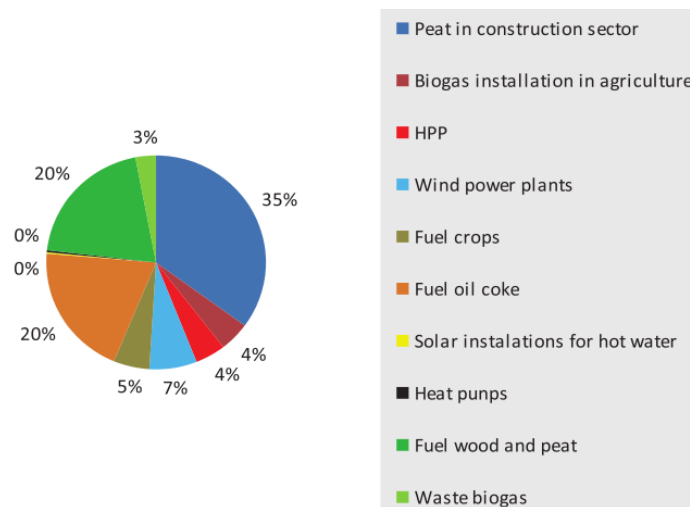


Fig.3: Structure of local fuel and energy sources use, including RES, until 2015 [3]

Belarusian Law on Renewable Energy Sources, dated 27 December 2010, regulates relationships in the sphere of RES use for the generation of electricity, its further consumption and other ways of utilization, as well as the manufacturing of RES-based installations.

- The Law determines the measures of state support for RES;
- Pricing policy aimed at encouraging the use of RES and energy generated from RES;
- Encouragement of investment activities, including providing for favorable conditions for national and foreign investors;
- Guaranteed connection to state power grids;
- Tax concessions in accordance with the legislations.

Resolution of the Ministry of Economy of RB on Tariffs for RES Electricity set forth multiplying ratios differentiated by the type of RES (solar energy 2.7, other renewables 1.1 for 10 years. Subsequent 10 years -0.85).

References

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1. National Program of the development of domestic and renewable energy sources for 2011 – 2015 (approved by the Regulation of the Council of Ministers of the Republic of Belarus of 10 May 2011 № 586).