MODERNIZATION AND TRANSFER TO LOCAL FUEL USE FOR BOILER HOUSES IN THE BEZHANITSKIY RAYON

Bezhanitskiy Rayon
Pskov Region
Russia

The research is aimed at the modernization of boiler houses in the Bezhanitskiy Rayon (BR). This will help to optimize the heat and power supply in housing and industries and to decrease the dependence of the BR on imported oil. It also serves to increase the energy efficiency which can lead to a decrease in GHG emissions.

Description

- It is necessary to construct new boiler houses working on peat and wood in order to optimize the power and heat supply in BR.
- The suggested activities are relevant for BR as the depreciation of key assets such as existing gas boiler houses is very high (68%), processing equipment efficiency is very low (KPI 50%), and the percentage of pumping equipment with frequency regulation systems is very low (20%).
- Only 2% of heat energy is produced by boiler houses using local fuels.
- BR has vast peat deposits and forest estates with unsalable wood.

Figure 1. Modernized boiler house in Luschik village of Bezhanitskiy Rayon (inside view)

Main conclusions

The modernization of boiler houses will help to increase their energy efficiency and to decrease greenhouse gases emissions by:

1. A 28% increase in the boiler house equipment Key Performance Indicator (KPI)
2. Decrease in transport costs. Currently, transport costs can account for up to 50% of total costs for coal and 20% of oil fuel costs.
3. Coal and oil fuel will be substituted with local fuels.
4. The costs of energy for industrial needs will decrease by 30%.

Responsibility: Bezhanitskiy Rayon Administration
Further information: in Russian http://bezhanicy.reg60.ru

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