

Title of the measure:	CS11 Reconstruction of thermal energy distribution in DH systems (Rekonstrukcija sistema za distribuciju toplotne energije DG)
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General description

The measure promotes reducing consumption of energy products for Distant Heating. The losses of heat dissipation through the insulation of heating pipes will be reduced as well as the losses incurred by leaking of hot water from the heating pipes. Energy savings through reconstruction (and modernization) of the system for distribution of thermal energy in DH system, which means: replacement of old pipes, insulation and other equipment related to DH.

Due to the state of the DH system in Serbia, the reconstruction of the system for distribution of thermal energy needs a package of measures which is planned for all DH systems in Serbia. (More than 60% of hot water pipeline in DH systems is older than 20 years. The average age is 28 years.) Reconstruction (and modernization) of DH systems includes replacement of pipes, joints, isolating valves and other heating pipes equipment. These measures can reduce heat loss due to worn or damaged insulation of pipes, valves and other similar equipment. In addition, it is very important to reduce leakage of hot water through the cracks or rusty porous walls of dilapidated heating pipes, joints and seals.

Reducing the leakage of hot water from the distribution system in DH leads to reduced fuel consumption for additional heating of water and reduced operating costs for chemical water use within the DH system. This measure is implemented as a part of the 4th phase of the "Rehabilitation program of DH system in Serbia" via KfW bank and the MME. The project is being implemented in 20 local government units with a total power consumption of 10.500 TJ.

Institution in charge of the implementation of activities is Ministry of Mining and Energy.

Impact evaluation

Estimated energy saving amount to 5.2 TJ annually per kilometer of reconstructed heating pipes. It is assumed that losses of water in the system are higher than 10% in the existing heating system, it should be reduced to the level of projected losses, which is below 1%. This assessment is based on the results of the energy savings which will be realized after the completion of the third phase of the "Rehabilitation program of DH system in Serbia".

Interaction of measures

None

Historical data

None

References

Third National Energy Efficiency Action Plan of the Republic of Serbia,

http://www.mre.gov.rs/doc/efikasnost-izvori/efikasnost/Treci_akcioni_plan_za_energetsku_efikasnost_Republike_Srbije_za_period_do_2018_godine.pdf



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