



Complete refurbishment of the central heat supply

Municipality of Kovářská

System/Solution:	Replacement of the LHO source with a wood-pellet biomass boiler with output of 1MW
Fuel:	Wood pellets
Fuel delivery method:	Modern tank with ENplus A1 certification and integrated dust extraction
Annual fuel consumption:	800 tonnes of pellets
Size of fuel stock:	80 tonnes
Volume of delivered heat:	14 000 GJ
Achieved annual heat cost savings:	25%
IVORY Energy's solution includes:	Formulation of a proposal of the optimum heating method, project documentation, arrangement of the building permit, 100% financing, construction and subsequent operation of the boiler facility, continuous remote monitoring of operation from central dispatching, delivery of fuel using a certified tank

Implementation details

The town of Kovářská is located in the Chomutov district of the Ústí nad Labem region. The original central boiler facility was administrated by the company Služby obec Kovářská. The central boiler facility supplies heat and hot non-potable water to thirteen buildings of a residential (total 250 apartments) and non-residential (school, town hall, mountain inn, sports facility) character. The boiler facility operated with four obsolete oil boilers with total heat output of 4 MW. Služby obec Kovářská did not have sufficient financial or human resources for refurbishment of the boiler facility with the aim of replacing the existing heat source with a new source using a different, less expensive fuel base.

The objective of IVORY Energy's project was to create an efficiently and ecologically operating central heat supply to replace the uneconomical system based on burning LHO as a heat source. The new system would generate heat from wood biomass, specifically wood pellets. In September 2012, refurbishment was begun while the facility was in full operation. In the course of refurbishment, two existing 2x1MW oil boilers were removed and replaced with a single top-tier wood-pellet biomass boiler with output of 1MW. Two other oil boilers in better condition were retained as a backup source. We placed the central 80t fuel container in the current LTO fuel storage room. Trial operation began at the end of March 2013. Thanks to the finely tuned system, the 1MW pellet source is able to ensure year-round provision of heat in the given location. In connection with the refurbishment, IVORY Energy ensured connection of additional customers to the central heat supply system.



Reference:

"In addition to the fact that heating costs fell and we achieved 25% savings, all emissions parameters were improved in comparison with LHO." Representative of the municipality of Kovářská