



MONTENEGRO

Partners:

- Municipality of Kolašin

Estimated total investment:

- €6.3 million

EU technical assistance:

- €0.3 million¹

Duration of Technical Assistance:

- December 2013 – August 2018

Lead IFI:

- KfW

Technical Assistance provided by:

- Infrastructure Project Facility 3 (Mott MacDonald – WYG – Atkins IPF Consortium)

Energy

Kolašin Biomass District Heating System: Feasibility Study

Kolašin Municipality, population 9,900, lies in the mountainous area of Montenegro's Gora National Park, one of Europe's largest virgin forests. Well connected to national road and rail transport routes and not far from the international airport in Podgorica, Kolašin is one of the major mountain tourist attractions in Montenegro.

At an altitude around 950 m, the town experiences severe winters that require an eight-month heating season. Residents and industries use wood, oil, coal and electricity for heating. At the moment there are ten large heating boilers using oil and coal as their main energy source that service the needs of the hotels, schools, hospital and a number of municipal buildings. Most private houses use firewood for domestic heating and electricity to heat water.

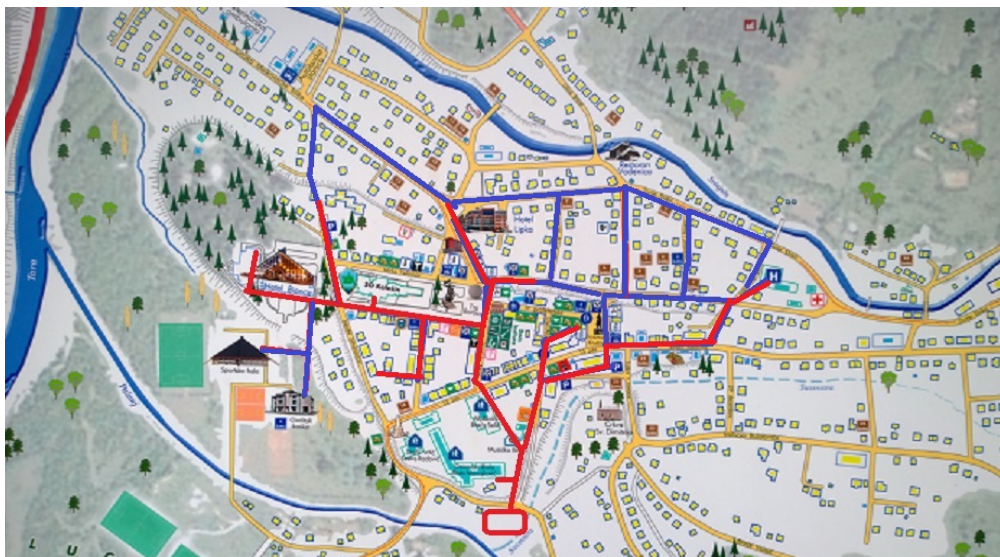
The uncontrolled burning of moist wood and the use of heating oil and coal endanger the environment as their combustion results in significant quantities of CO₂ (estimated at approximately 1,000 tonnes per annum) and other harmful gases (NOx) along with micro-particles.

This technical assistance grant has covered the cost of a detailed feasibility study, including preliminary design for a new, centralized district heating system based on biomass. The project documentation has recommended two equal-sized boilers of 8 MW each and a distribution network in the central area of the town.

The study conclusions have also indicated the need for a further grant for the investment works (approximately 50% total costs) as the project would not otherwise be financially viable. A project brief has been prepared to assist the beneficiary/partner with the identification of further financing.

Results / Benefits:

- Feasibility Study, including preliminary design
- Project brief for co-financing of investments
- Better air quality and standards of living for the citizens as well as visitors of Kolašin.



Proposed centralized district heating system layout © EU, courtesy of IPF3.