

EXECUTIVE SUMMARY

Feasibility study:

Energy management system for School Complex No 1 in Gorlice

Pilot investment “Energy management system for School Complex No 1 in Gorlice” aims at installation of intelligent energy management system, which can help achieve energy savings, with additional educational role and increasing citizens awareness, showing how different decisions can influence on energy consumption and environment changes.

Identified problems

Gorlice District, as an administrator and owner of several large public building, seeks for sustainable energy sources. Buildings, usually build in outdated technologies, with poor heat and electricity installations are high energy consumers. District’s authorities are trying to change this problem through buildings thermomodernization and increasing energy efficiency of buildings thanks to better energy management.

Investment shall facilitate the solution of several problems, like:

- in term of Malopolska region - high air pollution, especially by dust (exceeds acceptable norm);
- usually ineffective and obsolete heating installation and not energy efficient infrastructure of public buildings which is reflected in increased emissions. Lack of control of energy consumption is directly connected with higher costs of buildings maintenance;
- increasing unemployment and low high-educated rate (no high schools at Gorlice District and migration of people to big cities) - project thanks to educational role can increase educational level and makes job start easier.

The above identified problems resulted in formulating the following objectives:

Main objective: increase of energy efficiency in School complex No 1 in Gorlice through energy management system installation.

Indirect objectives: Installation of the system will contribute to:

- decrease of fossil resources consumption and improve the environment quality;
- improve of quality of public service;
- sustainable development - increase of District’s costs savings and funds redirect to other actions (which may provide another savings)
- improvement of living conditions, especially of the school users

Energy management system was planned to be build and lunch within this investment. It shall ensure possibility for steering of heating network, but also metering and balance heat and electricity. System should also have educational function - some parameters can be changed by students. For this reason small reconstruction of heating system shall be done, with some improvement of steering of central heating installation (without changes in

boilers). Moreover exchange of internal electrical and telecommunication installations were planned. Total cost of investment implementation: ca. 308 000 €

The feasibility study covers the following themes::

1 Information on the project

- Introduction;
- Analysis of social and economical environment of the project: direct, social and ecological impacts assessment; (location, climate conditions, demography, education, economy);
- Project's compatibility with strategic documents;
- Identified problems;
- Intervention logic: objectives, products/results of project implementation, analysis of beneficiaries;
- Institutional analysis: feasibility of the project; Legal status of the beneficiary; Project's sustainability.

2 Technical and technological analysis

- Description of before intervention state
- Scope of the work

3 Financial analysis

- Sources of the investment financing;
- Financial prognoses, return of investment;

4 Summary and recommendations

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Legal notes:

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