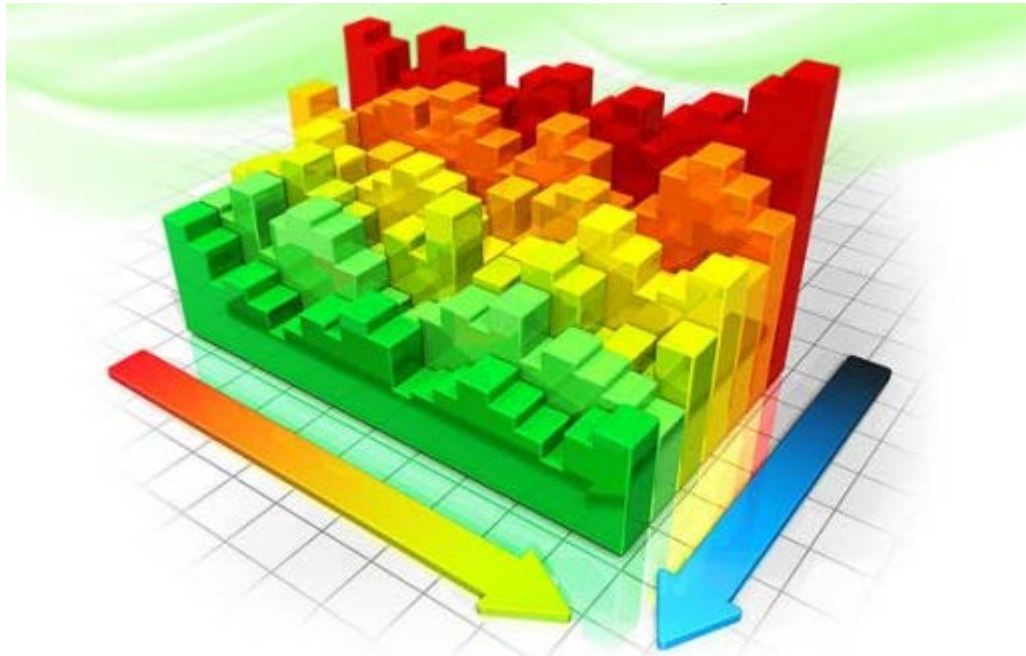
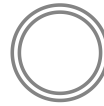


PROJECT IDENTIFICATION FORM - PIF

ELEMENTARY SCHOOL "Ivan Goran Kovacic" Livno



PROJECT DESCRIPTION



STATE IN ELEMENTARY SCHOOL

- School in use since 1968
- Two shifts, 794 pupils, 30 classes
- Total number of employees 56

Total area 2,660 m²
two (2) floors

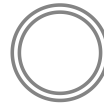
Stone walls without insulation 840 m ² 1.15 W/m ² K	Floor 1,743 m ² 0.44 W/m ² K	Windows 330 m ² 2.70 W/m ² K	Doors 35 m ² 3.1 W/m ² K	Roof with no insulation 1.980 m ² 0.63 W/m ² K
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BIOMASS HEATING SYSTEM

HEAT DEMANDS
277,060 kWh/a (17,185 EUR/a)

ELECTRICITY DEMANDS
25,549 kWh/a (3,228 EUR/a)

PROJECT DESCRIPTION



PLANNED ACTIVITIES

- Implementation of energy efficiency measures:

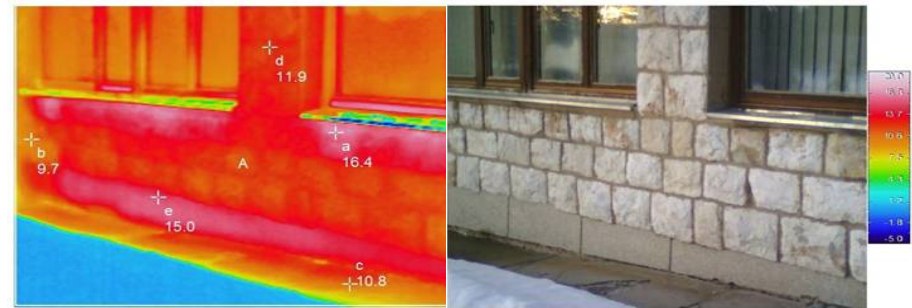
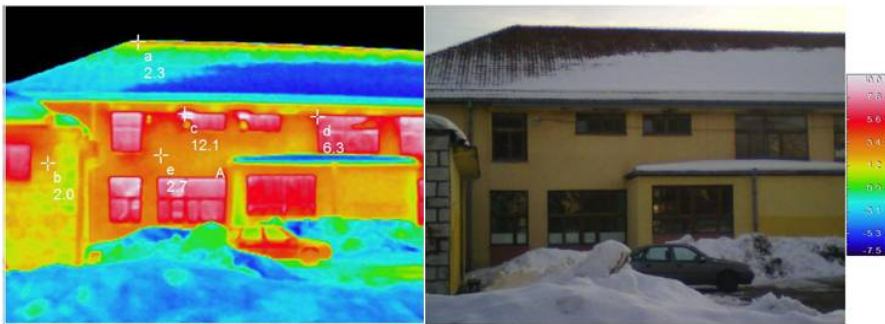
CURRENT STATE	Heating without substation	Windows 330 m ² 2.70 W/m ² K	Doors 35 m ² 3.1 W/m ² K	Roof with no insulation 1.980 m ² 0.63 W/m ² K
STATE AFTER IMPLEMENTATION OF EE MEASURES	Installation of heat substation	Windows replacement 330 m ² 1.8 W/m ² K	Doors replacement 35 m ² 2.2 W/m ² K	Roof insulation 1.980 m ² Mineral wool 10 cm - 0.34 W/m ² K
	Develop Guidelines for work and maintenance of all systems			

PROJECT BENEFITS

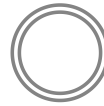


MAIN BENEFITS ARE:

- Reduction of HEAT DEMANDS and reduction of ENERGY COSTS;
- Increase of ENERGY EFFICIENCY and THERMAL COMFORT;
- Increase of AWARENESS of local community regarding energy efficiency and it's benefits.
- CO2 EMISSION REDUCTION 0.7 t/a



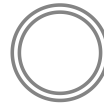
EXPECTED PROJECT COSTS



INVESTMENT/COSTS	ESTIMATED INVESTMENT COSTS (EUR)	ESTIMATED SAVINGS (EUR/a)
Roof insulation	17,824.00	1,004
Windows and doors replacement	54,146.00	8,637
Installation of new automatic heat substation	9,800.00	1,126
Work and maintenance manuals/guidelines	0	319
TOTAL INVESTMENTS AND REVENUES	81,770.00	11,086.00

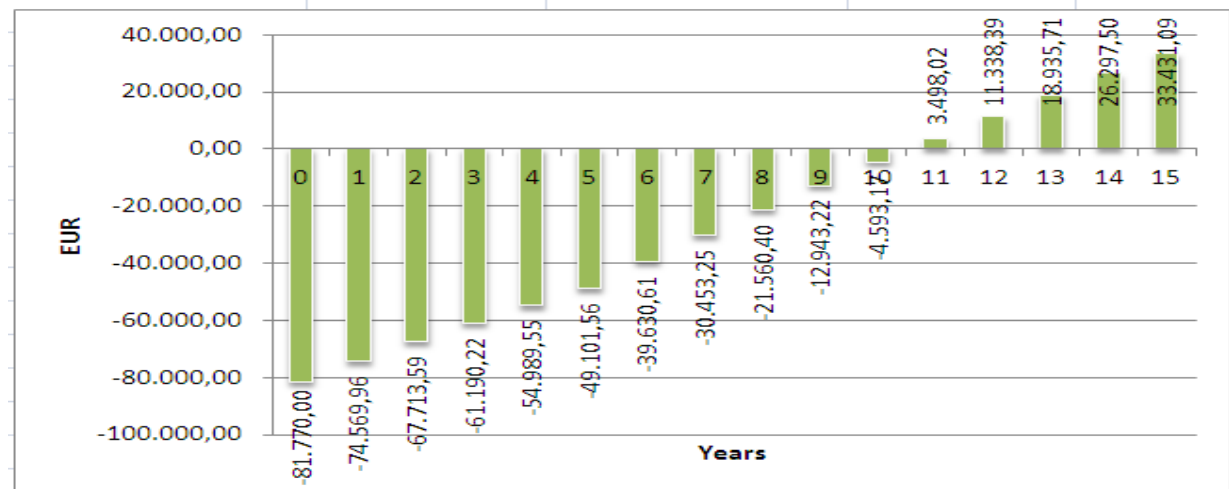


CASH FLOW



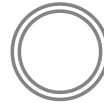
YEAR*	0	1	2	3	4	5
CAPITAL INVESTMENT	81.770,00					
SAVINGS		11.086,00	10.742,33	10.409,32	10.086,63	9.773,95
BANK LOAN		3.885,96	3.885,96	3.885,96	3.885,96	3.885,96
TOTAL SAVINGS		7.200,04	6.856,37	6.523,36	6.200,67	5.887,99
CASH FLOW	-81.770,00	-74.569,96	-67.713,59	-61.190,22	-54.989,55	-49.101,56

*All figures are in EUR



Bank interest rates: 5-7%
 Inflation: 3.1%
 Exchange rates:
 1 BAM = 1.955830 EUR
 1 BAM = 1.507217 USD
 1 BAM = 0.047449 RUB

THANK YOU FOR YOUR ATTENTION



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