



## Case Study

# Metalik JSC

### Project Details

#### sector

Hotel

#### type of project

Energy Efficiency

### Project Results

- » Increased competitiveness
- » Reduction of energy costs
- » More attractive look
- » Better environment for the staff and guests of the hotel

## Overview

Metalik JSC is a hotel located in Stara Zagora. The installation of roof and wall insulation combined with installation of new and modern heating and cooling equipment not only reduced the energy consumption in the building but also provided better indoor conditions for all the staff and guests.

## Energy Efficiency Measures Installed

- ✓ Building envelope improvements, with introduction of thermal insulation for the roofs, external walls, and windows replacement
- ✓ Introduction of gas-fired heat-only boiler for space and air heating, with heat pumps for heating and cooling, and rehabilitation of heat distribution system
- ✓ Introduction of gas fired, heat-only boiler for DHW service and swimming pool, with rehabilitation of distribution system
- ✓ Replacement of the passenger lifts

**Energy Efficiency  
Reduces Energy Costs  
by 76.26 %**

### Metalik JSC

#### Investment Details

|                         |             |
|-------------------------|-------------|
| Total Project Cost      | EUR 767,387 |
| KIDSF Grant             | EUR 92,025  |
| Loan                    | EUR 613,500 |
| Simple Payback Period   | 4.22 years  |
| Internal Rate of Return | 24.81%      |

#### Estimated Annual Savings

|                                   |             |
|-----------------------------------|-------------|
| Lower Light Fuel Oil Consumption  | 201.2 tons  |
| Electricity Consumption Reduction | 668,834 kWh |
| O&M Cost Savings                  | EUR 4,750   |
| Total Cash Savings                | EUR 181,945 |

#### Carbon Emission Reduction

(January 2011 – December 2012)

**2,341 tons**