

# EAST - GSR

## Solar Thermal Applications in Eastern Europe with Guaranteed Solar Results



Task 5.1.

**"Visits and identification of existing collective installations"**

BULGARIA

8- Elderly home (Silistra)

20/12/2006



## Inventory of collective solar installations

Country: **Bulgaria**

file n° : 8

### A. IDENTIFICATION

#### 1. Installation

- Project name: Solar installation for Domestic hot water (DHW) in home for elderly people - Silistra
- Project address: Albena str 5
- Locality or town: Silistra
- Building type (hotel, hospital, hammam, etc...): **Home for elderly people**
- Year of installation start up: 2001
- Latitude: 44°6' N
- Altitude: 135 m

#### 2. Owner or representative of the owner.

- Name / Function: Municipality of Silistra; Emil Goychev – chief engineer
- Address: Albena str 5
- phone: +359 86 816 318
- fax: none
- e-mail: none

### B. SITE

- Position of the solar collectors:
  - integrated in to a sloping roof
  - independent on fixed supports, on a sloping roof  
roof slope: .....° from horizontal
  - on a horizontal terrace with inclination of 45° –on the roof**
  - on the ground
  - on a gable
- Orientation of the solar collectors: 0° from South (straight south)
- Approximate distance between the collector array and the technical premises (m): about 3,2 m.

### **C. CHARACTERISTICS OF THE INSTALLATION**

- Collectors                      Manufacturer: Greece  
    Type: flat plate, high selective surface  
    Surface: total absorption area 134 m<sup>2</sup>
  
- Storage tanks                Number: 2  
    Total volume: 5,2 m<sup>3</sup>

### **D. HOT WATER CONSUMPTION**

Use ..... Temperature (°C) 60°

| Average monthly consumption in litres/day |     |     |     |     |     |     |     |     |     |     |     |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Jan                                       | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|   |     |     |     |     |     |     |     |     |     |     |     |

No available information

### **E. AUXILIARY HOT WATER HEATING**

*Type of energy (if mixed, indicate the proportion of each):*

- DHW (Device Hot Water):  natural gas                       propane gas  
    |    **fuel**     electricity  
     other

- Principle:                      |    **storage**  
     instantaneous

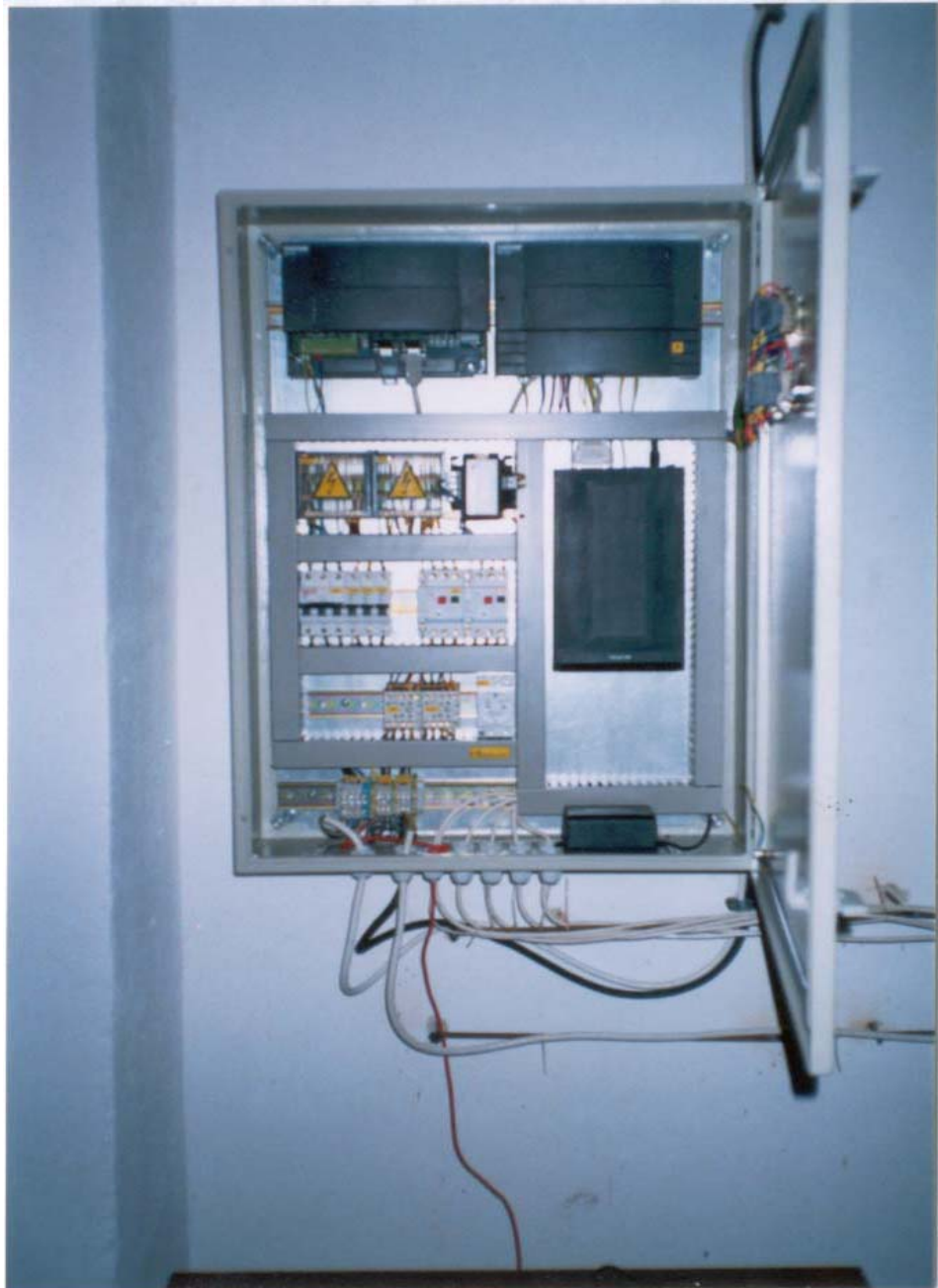
For every single flat the solution is individual and with natural gas.

### **F. OBSERVATIONS**

- Apparent state: Good condition

- not working                      |                      **working**

- Users opinion: normal operation



*Electrical board with Remote Control and monitoring system of the solar installation*