

## **CAC** Demonstration Pilot Project

| Location                 | 9700 Shumen, Bulgaria,<br>Latitude: 43º 16' N Longitude: 26º 56' E   |
|--------------------------|--|
| Microclimate             | Continental climate zone   |
| Size of each dwelling    | $30 \text{ m}^2$<br>Total gross area – 1250 m <sup>2</sup><br>Total heated area – 900 m <sup>2</sup>   |
| Number of dwellings      | 30   |
| Type of dwellings        | Apartment – one bedroom dwellings  |
| Ventilation and lighting | Natural cross ventilation through opening of windows;<br>Lighting in common areas is switched off automatically;<br>Lighting in dwellings is individually controlled by the tenants; |
| Construction             | Monolithic structure with concrete skeleton;   |



| Heating                       | All dwellings are heated by electrical devices located in each living room |
|-------------------------------|--|
| Cooling                       | None   |
| Mechanical ventilation system | No mechanical ventilation  |



| Control of the heating<br>and cooling System<br>Set Point temperatures<br>Lighting system | Common electricity meter for the entire building;<br>Individual apartment meters installed;<br>No cooling system;<br>Temperatures in each dwelling are set individually by the tenants;<br>There is no maximum temperature level;<br>Lightning in the apartments is all controlled by the tenants and therefore |
|---|---|
|   | individual;<br>Lighting in common areas is automated;   |
| System used to produce hot water  | Individual hot water heating appliances for each dwelling;  |
| Measurement<br>equipment used for<br>energy monitoring                                    | <text></text>   |
| Energy consumption data   | The electricity and water consumption is paid individually by the tenants on the basis of the individual consumption;   |
| Potential for energy conservation   | Improving the building envelope is desirable:<br>– Insulation of roof construction;<br>– Insulation of deck over non heated basement;   |
| Water management  | Cold water meter installed at building level in the basement;<br>Individual water meters for each dwelling;   |