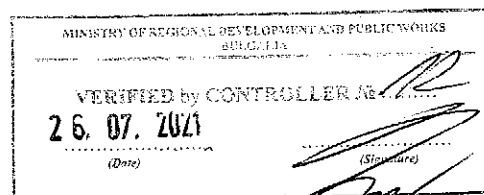


PROJECT

**PRO-ENERGY - PROMOTING ENERGY EFFICIENCY IN PUBLIC BUILDINGS
 OF THE BALKAN MEDITERRANEAN TERRITORY**

Work Package:	<i>WP3: Joint Regional Analysis, Strategy and Framework</i>
Activity:	<i>3.4</i>
Activity Leader:	<i>Cyprus Energy Agency - CEA</i>
Deliverable:	<i>Joint Criteria for the selection of the pilot public buildings</i>

Version:	<i>Draft 1.0</i>	Date:	<i>15/02/2021</i>
Type:	<i>D3.5.4 External expertise services subcontracted to external experts for the development of the contribution of RDA to the definition of the joint criteria for selecting pilot public buildings</i>		
Availability:	<i>Confidential</i>		
Responsible Partner:	<i>Regional Development Agency with Business Support Centre for Small and Medium-sized Enterprises</i>		
Editor:	<i>[Name of Editor]</i>		

**DISCLAIMER:**

This publication has been produced with the financial assistance of the European Union under the Interreg Balkan-Mediterranean 2014-2020. The contents of this document are the sole responsibility of the *Regional Development Agency with Business Support Centre for Small and Medium-sized Enterprises*, and can under no circumstances be regarded as reflecting the position of the European Union or of the Programme's management structures.

IDENTIFICATION SHEET

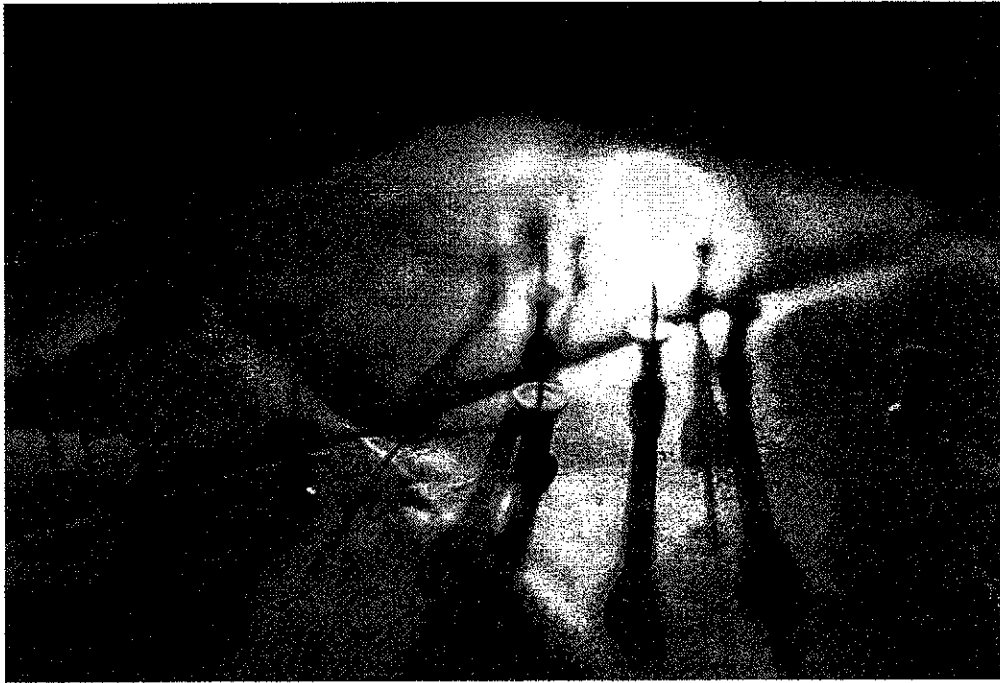
Project Ref. No.	[REDACTED]
Project Acronym	[REDACTED]
Project Full Title	[REDACTED]

Security (distribution level)	Confidential
Date of delivery	09/022021
Deliverable number	D3.5.4
Type	<i>Joint Criteria for the selection of the pilot public buildings</i>
Status & version	Draft 1.0
Number of pages	18
ACTIVITY	D3.5.4
contributing to the deliverable	<i>External expertise services subcontracted to external experts for the development of the contribution of RDA to the definition of the joint criteria for selecting pilot public buildings</i>
Responsible partner	<i>Regional Development Agency with Business Support Centre for Small and Medium-sized Enterprises</i>
Editor	<i>[Name of Editor]</i>

MINISTRY OF REGIONAL DEVELOPMENT AND PUBLIC WORKS BULGARIA
VERIFIED by CONTROLLER M. [Signature]
26. 07. 2021 (Date) [Signature]

[NAME OF THE PARTNER]

Page 1 of 18



SECTION 1

1. Definition of Joint Criteria for the selection of the pilot building

The selection of the pilot public building needs to address the following criteria:

- **Location [Building Area] /Climate Zone**

Consider if the main energy consumer is heating or cooling load (often depends on the season). *For example, in Cyprus there are 4 climate zones. Climate zone 4 (mountainous) has significantly different climate conditions than the other 3 zones, experiencing much colder winters.*

- **Type of building [School, museums, innovation centres etc]**

- **Cultural Value of the building**

Buildings with high cultural value or listed, present less opportunity for interventions and therefore will be difficult to reach energy efficiency level. Large interventions may alter their heritage character and hence are less attractive for big scale renovations.

[NAME OF THE PARTNER]

MINISTRY OF REGIONAL DEVELOPMENT AND PUBLIC WORKS BULGARIA
VERIFIED by CONTROLLER № <i>[Signature]</i>
26. 07. 2021
(Date)

Page 7 of 13

- **Energy**

[Electrical Energy Consumption, Heating Fuel Consumption, Yearly Electricity cost, Yearly Heating cost, Water consumption, Energy Performance Certificate]

During the selection of the public building, it should take into consideration the higher the:

- Energy Consumption from electricity per m² of the building
- Heating fuel consumption per m² of the building

the higher the environmental impacts and financial benefit would be for the building. In addition, these indicators will help identify the building with a high cost per user.

- **Use of the building & number of Users/Staff**

Public buildings that have the environment high on their educational agenda, are considered more likely to combine more easily activities and educational tools. These will be used for raising awareness on energy saving and climate change adaptation and mitigation, increasing the project impact and ensuring the longevity of the results. Active and sensitized staffs are also very important for identifying suitable measures through the energy audits and for achieving a maximum impact of reducing energy consumption. The higher the number of staff the bigger impact the project will have. In addition, it is more beneficiary the building has also visitors (public) in order to give the best example of the energy consumption measures.

- **Electromechanical System**

[installation of RES]

- **Financial Support**

Financial support by other means will aid in the development of the project.

- **National, regional and local documents**

Pictures:



- Building Thermal Insulation Category based on the Directive 2002/91/EC on the energy performance of buildings (EPBD):

N/A

- Type of glazing (single, double, with thermal insulation etc.):

Plastic double glaze windows

- Type of thermal insulation on the roof:

Attic Air Sealing and Insulation

- Type of thermal insulation on the walls:

External EPS 6cm and mineral plaster

- Anti- seismic upgrade (planning):

It is a Monolithic building with wooden roof structure, vertically supporting structure - framed with brick washers; Reinforced in 2001 with new frame diaphragms. Between the floors, the slab is concrete.

- Visible structural issues (write description):

No cracks and deformations were observed on the bearing elements, as well as subsidence of the structure. There are no cracks on load bearing and partition walls. No leaks were found from the roof, streets and plumbing

- Visual building issues:

No

- Previous implementation of other Energy Efficiency measures:

In 2001 external wall isolation was made.

Comfort

- Summer thermal comfort issues from scale 1 (smaller) to 10 (bigger):

Summer temperature in Plovdiv is 35 degrees.

- Yearly Electricity cost per square meter (€/m²/yr.)
4.52€/m²/yr.
- Yearly Heating cost per square meter (€/m²/yr.)
Included in the cost of yearly electricity cost
- Yearly Electricity cost per user (€/user/yr.)
160€/user/yr.
- Yearly Heating cost per user (€/user/yr.)
Included in the yearly cost per user
- Yearly Water Consumption per user (Litter/user/yr.)
Average annual water consumption per user 25 liters

Use of the building and number of Users/Staff

- Use of the building (as per the Directive 2002/91/EC)
University
- Number of staff
40
- Number of total users
650
- Number of users per shift (for buildings with 24h operation)
N/A
- Operation program (working hours)
08.00 to 18.00
- Environmental Education Activities
YES

- RES systems integrated in building environment (along with their technical characteristics, e.g. type, capacity etc.)

N/A

- Preventive and corrective maintenance contracts or procedures and inspection plans

Contracts for maintenance of air conditioning systems

