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MedZEBinars

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DESCRIPTION AND COURSE OBJECTIVES

Course description

This course allows to broaden the knowledge on how to approach the deep renovation of residential buildings in the Mediterranean area through a set of tools developed within the framework of the HAPPEN project.

Course objectives

At the end of the course, attendees will:

- Know the peculiarities of renovation in the Mediterranean area through the HAPPEN project.
- Get acquainted with the structure and contents of the HAPPEN platform.
- Get trained on the cost-optimal nature of the MedZEB approach (technical and financial).
- Be familiar with the Program aimed at generating a homogeneous market area for deep retrofitting.
- Be able to issue the MedZEB Voluntary Certification Scheme according to the MedZEB protocol.
- Be able to define a set of cost-optimal solutions to renovate a building according to the climatic zone, the reference building, and an abacus of renovation measures.
- Be able to propose a financial solution based on a step-by-step, cost-optimal renovation.
- Get acquainted with the pilot cases where the MedZEB approach has been applied and their results.

PROGRAMME

Module 1. The HAPPEN project and the medZEB approach: an introduction.

- Deep renovation of the Med residential built environment: the HAPPEN project
- The HAPPEN program
- The HAPPEN Platform

Module 2. MedZEB protocol

- MedZEB Protocol and Monitoring Protocol
- MedZEB VCS

Module 3. MedZEB optimal solutions

- Representative Climates and Zoning
- Catalogue of reference buildings classes in Mediterranean Countries
- Abacus of «Renovation Measures» at Building and District Scale
- Optimal packages of Renovation Measures

Module 4. MedZEB financing proposal

- Innovative Financial Solutions

Module 5. HAPPEN pilot actions

- Introduction to pilot buildings and activities

CONTENT PROGRAMME

MODULE 1. THE HAPPEN PROJECT AND THE MEDZEB APPROACH: AN INTRODUCTION

Presentation of the HAPPEN project and and program, according to the MedZEB approach

Deep renovation of the Med residential built environment: the HAPPEN project

Authorship: Roberto Malvezzi (ITC-CNR, Italy)

Description: Introduction to the HAPPEN project and MedZEB approach

The HAPPEN program

Authorship: Roberto Malvezzi (ITC-CNR, Italy)

Description: Introduction to the main stages composed by the program

The HAPPEN Platform

Authorship: Paolo L. Scala (ITC-CNR, Italy)

Description: Introduction to the platform structure, functionalities, and contents

MODULE 2. MEDZEB PROTOCOL

Presentation of the definition and process scheme of the MedZEB protocol in order to issue the VCS in the different phases

MedZEB Protocol and Monitoring Protocol

Authorship: Luca Laghi (CERTIMAC, Italy)

Description: Explanation of the Protocol features, parts, actors involved and the process scheme.

MedZEB VCS

Authorship: Luca Laghi (CERTIMAC, Italy)

Description: Introduction to the definition, reasons, key aspects, and phases for issuing the VCS.

MODULE 3. MEDZEB OPTIMAL SOLUTIONS

Presentation about the reference buildings, representative climates, available renovation measures and, the precalculated packages of optimal retrofitting solutions for existing buildings in the Mediterranean Area.

Representative Climates and Zoning

Authorship: Chrysanthi Efthymiou (NKUA, Greece)

Description: In this session it is provided general information about climate classifications and basic content and references regarding climatic zones.

Catalogue of reference buildings classes in Mediterranean Countries

Authorship: Chrysanthi Efthymiou (NKUA, Greece)

Description: Identification of the most representative buildings in MED countries.

Abacus of «Renovation Measures» at Building and District Scale

Authorship: Giulia De Aloysio (CERTIMAC, Italy)

Description: Description of the set of renovation measures that can be applied in the Mediterranean Area and tailored to each Country.

Optimal packages of Renovation Measures

Authorship: Jose Manuel Salmerón (University of Seville, Spain)

Description: Definition of cost optimal retrofitting solution (POS), presentation of the precalculated packages of optimal retrofitting solutions for existing buildings and how to apply previous knowledge regarding reference buildings and representative climates to identify the best solution for a given actual building.

MODULE 4. MEDZEB FINANCING PROPOSAL

Presentation of the innovative financial solution developed by the HAPPEN Consortium.

Innovative Financial Solutions

Authorship: Francesca Pecchia (Harley&Dikkinson Consulting S.r.l., Italy)

Description: This session is aimed at the explanation of Versatile Energy Loan, that complements the Package of Optimal Solutions, creating a flexible and versatile Technical and Financial solution.

MODULE 5. HAPPEN PILOT ACTIONS

Presentation of the different pilots carried out in the framework of the HAPPEN project.

Introduction to pilot buildings and activities

Authorship: Theoni Karlessi (NKUA, Greece)

Description: Overview of the methodology followed in order to meet the project goals, a summarized presentation of each case study and the implementation of the Living Labs procedure.