





# GreenBuilding

## Minimising Energy Consumption for Green Buildings respecting present uses and public needs



## Dear Readers,

Welcome to our fourth issue of GreenBuilding Newsletter that we would like to share with you! It is our pleasure to introduce you to our new project, funded by the European Union under the ENI CBC Med Programme that brings together seven organizations from five Mediterranean countries, Greece, Spain, Lebanon, Tunisia and Jordan. Within this issue, the partnership of the project entitled "Minimising Energy Consumption for Green Buildings respecting present uses and public needs (Acronym: GreenBuilding)" would like to inform you about the progress of the aim of the project and its activities implemented so far. We will regularly update you with the latest news on the project. If this project lies within your interests, you are strongly encouraged to visit our website: http://www.enicbcmed.eu/projects/greenbuilding and follow us on Facebook and Twitter.

Yours Sincerely, The GreenBuilding Consortium

Start Date: 30 August 2019 - End Date: 29 August 2022 - Duration: 36 Months

For more information, please contact the project coordinator Mr. Nick Fifas, Research Fellow, Region of Peloponnese, email: nikfifas@ppel.gov.gr, nikfifas@otenet.gr; and Mrs. Marina Kouta, Project Manager, University of Patras, tel: 0030 2610996524, email: marina.kouta@g.upatras.gr.







## Introduction

GreenBuilding project is co-funded by the European Union under the European Neighborhood Instrument (ENI), through the ENI CBC Mediterranean Sea Basin Programme (ENI CBC Med Programme) 2014-2020 in the framework of the call for standard projects, priority B.4.3 – Support cost-effective and innovative energy rehabilitations relevant to building types and climatic zones, with a focus on public buildings.

## Aim of the Project

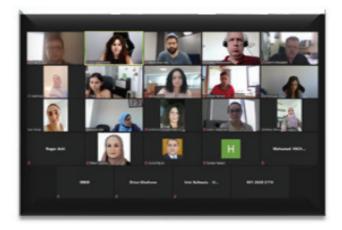
The project, started in August 2019, aims at reducing energy consumption and adverse environmental impact, by using Renewable Energy Sources and Energy Efficiency measures in public buildings, since renewable energies represent a natural competitive advantage for MED area. The GreenBuilding Consortium is composed of 7 partners from 2 EU – Mediterranean Countries (EUMCs) (Greece, Spain) and 3 MPC – Mediterranean Partner Countries (MPCs) (Lebanon, Tunisia, Jordan).

## Highlights

E 2,2 million total budget 1,9 million EU contribution 7 partners 5 countries 5 countries 36 months

## **Project Meetings**

4th Project Meeting, 7th Steering Committee Meeting, 6th Technical Committee Meeting and 1st Environmental Monitoring Committee Meeting on Monday, 5th of July 2021 focused on the activities to be held during Semester 4 and Semester 5 of project implementation.







## Creating synergies with other projects and initiatives

On 7th July 2021, the BorjCedria Technopark Management Company (Tunisia), partner in the Green-Building project, met with Ms. Leila BEN GACEM and Ms. Wiem BEN MUSTAPHA POUSSE, representatives of the FNCT (National Federation of Tunisian Communes) and SOLE, another ENI CBC Med project as they shares the same topic of improving energy efficiency and the use of renewable energy. The meeting was enhanced by sharing best project implementation practices and lessons learnt



during the first phase of GreenBuilding project, initial survey and building energy consumption practices. The main shared experiences was about the pre-pilot actions carried in the GreenBuilding project, namely the energy audit of the pilot building and the survey of identification of the energy refurbishment requirements.



Greater Irbid Municipality (Jordan), representing the Green-Building project, participated in the online Conference entitled "Climate Action and Energy Transition in EU and Gulf Cooperation Council (GCC): Adaptation and Mitigation Solutions" which was organized by the EU-GCC Clean Energy Technology Network, the Environmental Center for Arab Towns (ECAT) and the Global Covenant of Mayors for Climate

and Energy (GCoM) and took place on July 7, 2021, at 10.00 CET/12.00 GST. Mrs. Reham Jammal, representing Greater Irbid Municipality, took part in the first session of the conference, entitled "Resilient urban futures: Enhancing local capacities and adaptation/mitigation solutions". Among others, GIM participated in the training by MEDCITITES which was held on 6th, 13th and 20th of April 2021 about energy efficiency and the event "The Covenant Community and the Future of Europe" which was organized by the Covenant of Mayors for Climate & Energy. The training of MEDCITIES was organized by Technological Center on Biodiversity, Ecology and Environmental Technology (BETA), Spanish partner, with the scope of strengthening the cooperation of the GreenBuilding and MEDCITIES projects.

On 7th July 2021, the BorjCedria Technopark Management Company (Tunisia), partner in the GreenBuilding project, met with Ms. Leila BEN GACEM and Ms. Wiem BEN MUSTAPHA POUSSE, representatives of the FNCT (National Federation of Tunisian Communes) and SOLE, another ENI CBC Med project as they shares the same topic of improving energy efficiency and the use of renewable energy. The meeting was enhan-



ced by sharing best project implementation practices and lessons learnt during the first phase of GreenBuilding project, initial survey and building energy consumption practices. The main shared experiences was about the pre-pilot actions carried in the GreenBuilding project, namely the energy audit of the pilot building and the survey of identification of the energy refurbishment requirements.



GreenBuilding @greenbuildingeu



On June 14, 2021, BETA participated in the kick-off meeting of the "Innovative, Sustainable and Clean Energy Research and Education" UNITWIN network of UNESCO. The aim of the UNESCO UNITWIN Network is to focus on meeting Sustainable Development Goal 7 of the United Nations 2030 Agenda: to ensure society's affor-dable and sustainable access to energy. On June 17, 2021, BETA took part in the event, titled



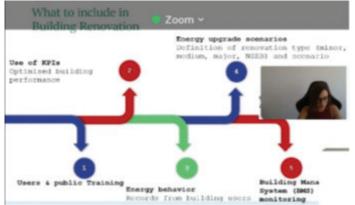
"From Manlleu to Colorado, to transform the world through the renewable energies -cycle "Talent convidat"". Mr. Albert Palou, from BETA TC, hosted the virtual event and introduced the projects related with energy efficiency and bioenergy in course at the center.



University of Patras, Greece, participated in the Planning Energy Renovation projects of Public Buildings" Living Lab which is an initiative of the Efficient Buildings Horizontal Project under the Interreg MED Programme. In the framework of the "Planning Energy Renovation projects of Public Buildings" Living Lab, two initiators, the University of Patras — Department of Civil Engineering and the Centre for Renewable Energy Sources and Saving (CRES), organised a two-day

event as part of the second phase (Educate and Train phase) of the Efficient Buildings Living Lab (EBLL), on 13th and 14th of May 2021.

The GreenBuilding project was presented by Mrs. Kouta Marina. University of Patras also participated in the Efficient Buildings Webinar (02/06/2021) which was an event organised by the Centre for Renewable Energy Sources and Saving (CRES) in the framework of the Efficient Buildings Horizontal Project of the Interreg MED Programme. The webinar titled "Energy renovation and management of public buildings: Stra-



tegy and Planning" aimed to discuss methodologies and tools that can be used to support public authorities in developing, implementing and monitoring energy renovation plans for their public building stock.



GreenBuilding @greenbuildingeu



## **Project Events**



As part of the energy refurbishment of the Mohamed Kassab Orthopedics Institute in Manouba, Tunisia, selected as a pilot building within GreenBuilding project, the BorjCedria Technopark Management Company (Tunisia) representatives met with ASSELEC company to discuss technical details to undertake the work on 15th July 2021.

Tip Guide for Office Building Users!

# GreenBuilding suggests 5 ways to reduce energy consumption in your office just by using lighting efficiently!



Are you wondering what to do to reduce energy consumption in your office building? Take note of the following tips and you will measure significant savings both in your energy consumption and your bills.

#### Tip 1 - Use energy efficient light bulbs

Reduce or replace inefficient, outdated, or excessive lighting within your building. Moreover, LEDs use 90% less energy than standard lightbulbs and they last significantly longer.

#### Tip 2 - Turn off lights when not needed

Turning off fluorescent lights saves energy, extends overall lamp life, and reduces replacement costs. Please also note that turning lights on and off uses more electricity than leaving the lights on.

#### Itp 3 - Ensure adequate light level and work with the natural daylight

Turn off electric lighting when adequate sunlight is available. Enjoying the daylight will also increase your productivity!

Tip 4 - Install lighting occupancy sensors that automatically turn lights on or off TEspecially when a room is not occupied continuously, this option is effective.

#### Tip 5 – Use focused lighting

If you don't need to light the whole room, just light the area you're working at!





# GreenBuilding suggests 8 ways to reduce energy consumption in your office by making better use of the heating and cooling devices!



Worried about how to reduce energy consumption in your office building? A list of 8 tips for heating and cooling the office could give you the solutions you are looking for!

#### Tip 1 - Dress for the season

You will be surprised from this tip but wear lighter clothes in summer and warmer clothes in winter, and wear layers so you can dress up and down accordingly. This will also increase your performance at work!

## Tip 2 - Control the temperature

Controlling the room temperature is crucial to saving money on your energy bill.

- Cool your office to 25°C in summer
- Heat your office to 20°C in winter

## Tip 3 - Keep doors and windows closed when heating your office

In this way heat doesn't escape, but open doors and windows when it is warm to minimise air conditioning.

## 🎱 Tip 4 - Repair any damage

Holes and gaps around walls, windows, doors, and skylights should be fixed to prevent heat escape.

🎱 🛛 Tip 5 - Use an energy management system

This will indicate you the optimal times for your air conditioner.

- Tip 6 Perform an annual maintenance on the units Annual preventative maintenance will ensure that your system runs as efficiently as possible.
- Tip 7 Change or clean the filters of the units regularly The more you use the units, the more air and particles and being through the system. Change or clean your units' filters every month during peak cooling or heating seasons.

### Tip 8 – Use fans instead of air conditioning By using the fan alone to provide cool air and ventilation, more power and energy is saved by the unit.

## **Project Website & Social Networking**

Learn more about us! http://www.enicbcmed.eu/projects/greenbuilding

Through our Newsletter you can gain an overall perspective on the progress of GreenBuilding project. You can also be informed on the GreenBuilding progress and news via its Twitter and Facebook accounts.





## **Project Partners**





#### **Region of Peloponnese (PPEL)** https://www.ppel.gov.gr/

Peloponnese, a region in southern Greece, includes the prefectures of Arcadia, Argolida, Korinthia, Lakonia, and Messinia. *Contact person:* Nick Fifas, nikfifas@ppel.gov.gr, nikfifas@otenet.gr

### University of Patras, Special Account for Research Grants (UPAT) https://www.upatras.gr/en/research

One of the main objectives of the University of Patras is the creation of knowledge through the promotion of international scientific research.

Contact person: Yorgos Stephanedes, ystephanedes@upatras.gr



## Technological Center on Biodiversity, Ecology and Environmental Technology, BETA (UVIC-UCC)

#### http://www.betatechcenter.com

The UVIC-UCC has become a driver of knowledge and innovation for the territory, with international reach.

Contact person: Albert Palou Vilar, albert.palou@uvic.cat

## المختارة محمد ترين المختارة المختارة



Ecopark

## Moukhtara Municipality (M.M.)

#### http://www.moukhtara.org/

Moukhtara is a small town in the Chouf District of the Mount Lebanon Governorate of Lebanon.

Contact person: Roger G. El Ashi, ashiro@terra.net.lb

### Management Company of the technopole of borj cedria (SGTBC) https://ecopark.tn/

The Borj-Cédria Technopole has a strong research, development, R&D, training and technical education in Renewable Energies, Sustainable Development and Materials. *Contact person:* Zakaria Hamad, z.hamad@tbc.tn





## Jordan University of Science and Technology (JUST)

#### www.just.edu.jo

An internationally renowned university for quality education, community development, and creation and dissemination of knowledge. *Contact person:* Abdoul Rjoub, abdoul@just.edu.jo

## Greater Irbid Municipality (GIM)

#### https://irbid.gov.jo/

Greater Irbid Municipality is the second largest metropolitan population after Amman in Jordan and the highest population density in the kingdom *Contact person:* Reham Jammal, rjammal@ymail.com



