#### **Objectives ZEROCO2**

The overall objective of the ZEROCO2 project is to improve regional energy policies with regards to environmental sustainability and mitigation of climate change risk, with a special focus on greening the building sector through enhancement of various ecofriendly energy sources and technologies, stressing its importance as an incubator for new markets in the field of energy, technologies, services and business models. This project will represent and implement near zero CO2 emission buildings (NZCO2EB) due to energy use, which means that the buildings do not produce CO2 emissions due to their use, in policies addressed at the same level as had been done for Nearly Zero Energy Buildings (NZEB). It is important to note that the EU policies do not define NZCO2EB due to energy use, hence the need for the ZEROCO2 project.







#### **Contact Information**

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#### The ZEROCO2 partnership

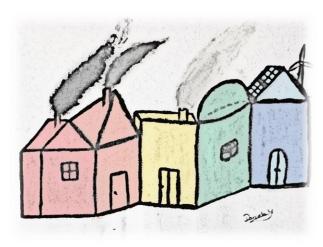


- Local Energy Agency Spodnje Podravje (LEA) – Slovenia
- Mediterranean Agronomic Institut of Chania (MAICh) – Greece
- Molise Region Italy
- > Municipality of Kaunas District Lithuania
- European Institute for Innovation (ElfI) Germany
- > Thermopolis LTD Finland
- Agency for Sustainable Mediterranean
   Cities and Territories (A.VI.TE.M) France
- ➤ University of Malta Malta



- @ZEROCO2Project
  @@ZeroCo2 Project
- https://www.linkedin.com/groups/8538366
- https://www.interregeurope.eu/zeroco2/

# Promotion of near ZERO CO2 emission buildings due to energy use



**ZEROCO2 Project** 

2 = 110

INTERREG EUROPE
PROGRAMME 2014-2020



### **ZEROCO2 Project – what is it?**

#### Issues addressed

ZEROCO2 addresses regional policies in the field of environment and energy and will support actions as well as investments to increase levels of energy efficiency in public buildings and the housing sector. This project will help to meet the EU target to reduce emissions by 20 % by 2020. Also, the partnership will meet the flagship initiative: "Resource efficient Europe" to help decouple economic growth from the use of resources, support the shift towards a low carbon economy, increase the use of renewable energy sources and promote energy efficiency.

## Regional Studies – The use of Renewable Energy Sources

Each project partner has developed individual studies highlighting the use of energy, especially renewable energy sources. Thus, the partnership is now able to identify the differences of its energy production and gaps within the use of renewable energies and make regional policy recommendations accordingly.

#### St. Ignatius College Primary School (Siggiewi, Malta)



Winter Summer

Incorporation of wall mounted photovoltaics on the south façade to generate energy while blocking solar radiation during summer



### Regional Policies & BP – A Common Study

To reach the set targets, the project partners have been actively communicating with their local, regional and national policy makers and other relevant stakeholders. The project has also produced several studies. The Common Regional Policy Report is the result of collating all the Regional Policy Studies and the Best Practices (BP) regarding the regional energy policies and interventions on the building sectors of 7 European Regions involved in the project. More information about these studies can be found on the ZEROCO2 Website

# Study on transformation of buildings to Near Zero CO2 emission buildings due to energy use and technical options comparison

At this stage of the project, each project partner has developed one or more models to transfer an existing building to a near zero CO2 emission building. Thus, the first step of identifying the construction and equipment parameters to calculate the energy performance of each building was executed as stated above.

The reference scenario of each model included a layout description of one or more possible variants (combination of different RES and accessible technologies), providing a description of these technologies used, with an estimation of cost for the implementation of each of the chosen regional measures. Running concurrently is horizon scanning for international best practice, with a focus on replication across the entire EU28.

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https://www.interregeurope.eu/zeroco2/

# Cost benefit analysis across the EU-28 in promotion of near Zero CO2 emission buildings due to energy use

There exists a number of different transnational and national definitions and concepts for low energy and ultra-low energy buildings that incorporate CO2 emissions. Some of them include renewable energy production on site. There are many reasons why it is important to build ultra-low-energy buildings; political, economical and ecological. The ZEROCO2 project created a reference template that provides detail of why the EU28 should build ultra-low energy near zero CO2 emissions properties:

- To take action against climate change and reduce energy consumption
- Ultra-low-energy buildings in general have a lower environmental impact
- Lower life cycle costs for Ultra-low-energy buildings
- > To fulfil political agreements, EU directives and regional policies.

To view the document online, visit the ZEROCO2 website.



