

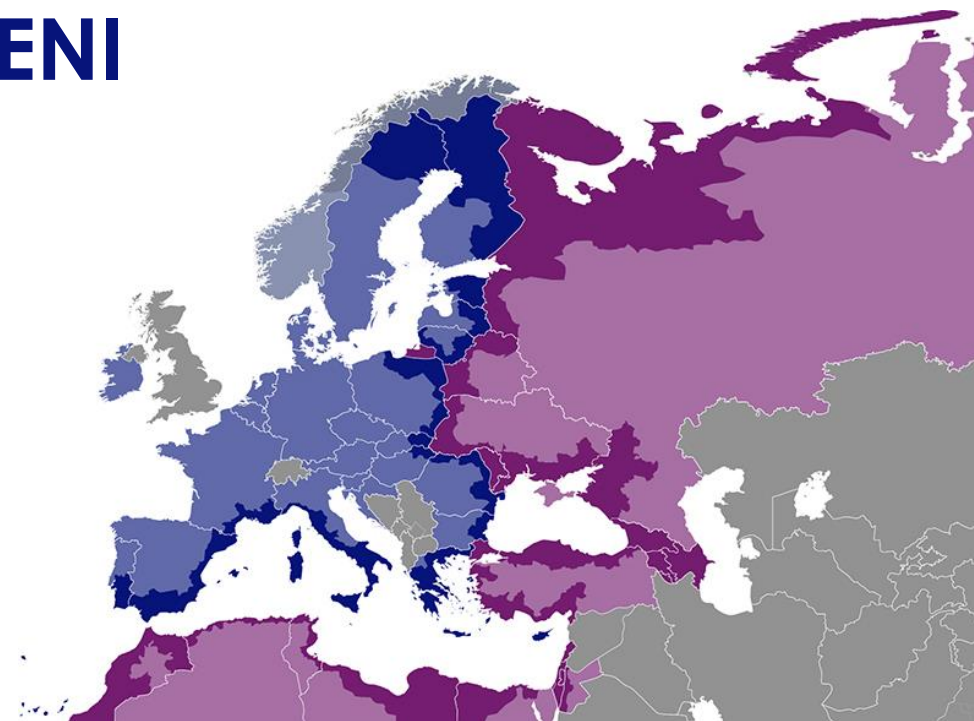


Technical support to the implementation and management of ENI CBC programmes

A more energy efficient Danube Region: experience from ENI CBC

EUSDR Embedding Week

13 July 2022



A project funded by the European Union



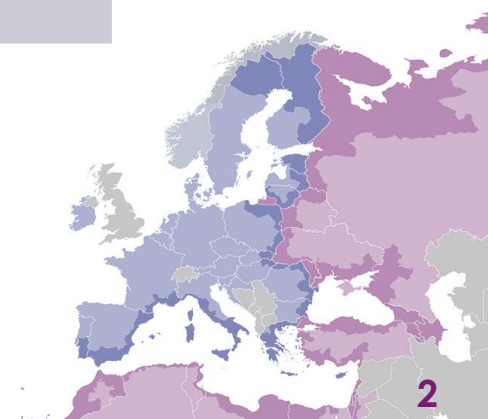
Implemented by a consortium led by



Overview of selected SO in Interreg NEXT



Specific objectives selected	Poland-Ukraine	Hungary-Slovakia-Romania-Ukraine	Romania-Ukraine	Romania-Republic of Moldova	Black Sea Basin
SO 1.1	-	-	-	-	Yes
SO 1.3	-	-	-	-	-
SO 2.1	-	-	-	Yes	-
SO 2.4	Yes	Yes	Yes	Yes	Yes
SO 2.7	Yes	Yes	Yes	Yes	Yes

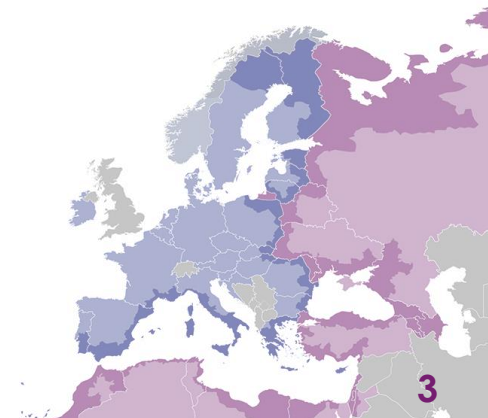


Research and promotion of highly efficient energy generation through trigeneration by using solar renewable resources for getting electricity, heat and cold and purchasing of equipment

Institute of Energy of the
Republic of Moldova

Technical University
"Gheorghe Asachi" of Iași

Iasi County Council



Budget

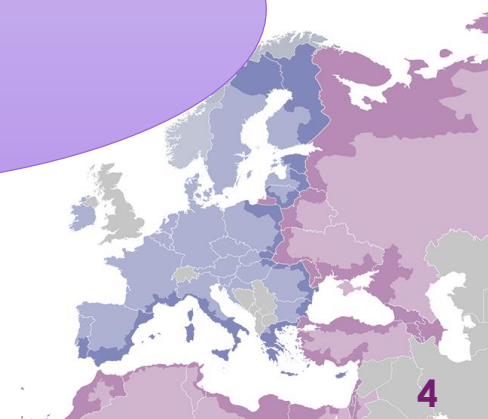


€ 170 808

**Implementation
period**



**11.12.2020 –
31.12.2022**



To develop a new technology for the efficient use of solar energy. In fact, it is a trigeneration system that will simultaneously produce electricity, hot water or cold as needed

Replication of the proposed technical solution for the realization of the smaller scale trigeneration system in another locality in order to confirm its capacity to operate in different conditions



Identification of the thermal energy and cold air quotas required to be produced according to the installed power of the photovoltaic system to obtain the highest efficiency of the trigeneration system

Creating new knowledge in the field of trigeneration systems, including patented, in order to promote the further development of technology in the country



Optimal configuration of trigeneration system

Reports on technical parameters of PVT

Guide for sizing of PVT

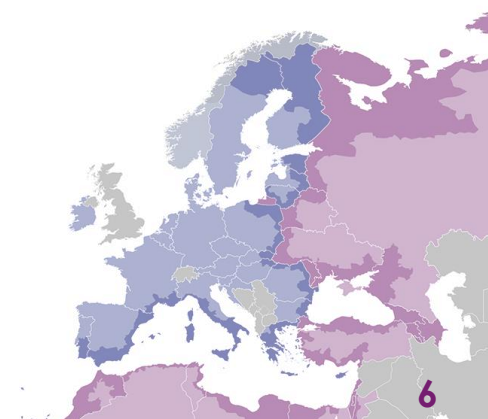


Patent application

PVT system test operation

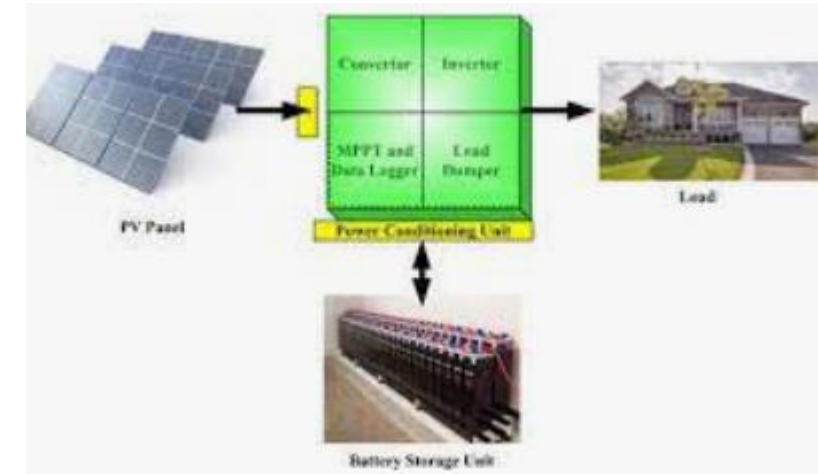
Results dissemination to target groups

Construction and commissioning of PVT systems in Moldova and Romania

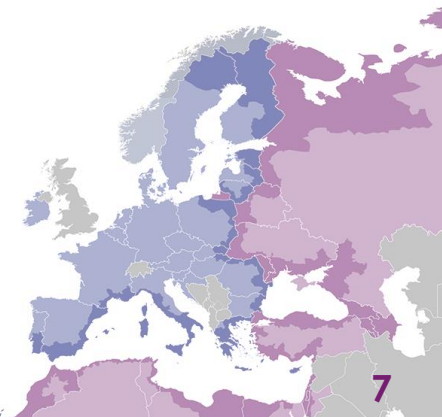


Project outputs /results

The PVT system consist of 42 photovoltaic panels (67.2m², 10.5kWp) that are mounted on the roof of the building of the spa resort Bucuria Sind, Vadul-lui-Vodă and it is equipped with capillary mats filled with antifreeze liquid to produce hot water with storage tank and installation for converting thermal energy into cold air for cooling spaces. The implemented technical solution will increase the efficiency of electricity production of PV by 5%, will produce annual thermal energy worth 7,320kWh and will generate 7900kWh of energy in the form of cold air, which will increase the overall efficiency of the solar energy to 44%, compared to 14% for the separate use of PVT.



The same type of PVT system at a scale of 4kWp will be developed and put into operation in Răducăneni, Iași, Romania to test the operating capacity in various locations

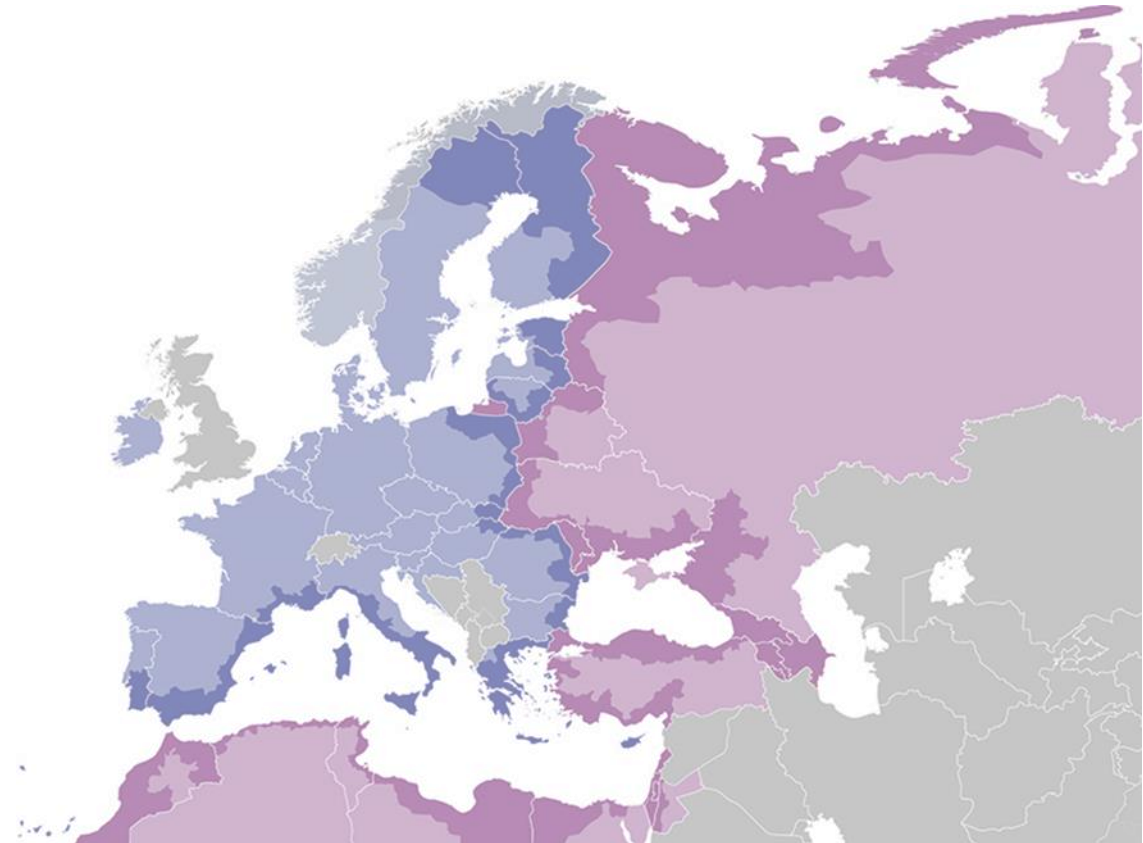




TESIM

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Cooperation between neighbours is the key to the success



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