

# Improving Energy-Efficiency and Energy Resilience of the Public Buildings in Ukraine: a Case of Kalush Central District Hospital

The aim of the Project is to strengthen energy-efficiency and energy independence of a healthcare facility in Ukraine by reducing energy consumption and introducing renewable energy sources

## WHY THIS PROJECT:



The aging building stock accounts for the largest part of the energy consumption in Ukraine and do not comply with the energy-efficiency standards



More than 50% of Ukraine's energy infrastructure was destroyed during the war and is constantly suffering from the attacks



Energy independence will ensure uninterrupted medical care to the population of Ukraine during power outages



The city of **Kalush** hosts 5,197 IDPs, 30 relocated enterprises and ranks first in the region in terms of foreign investments per capita



**KALUSH CENTRAL DISTRICT HOSPITAL**

serves over 14,000 patients a year and runs a rehabilitation center; it has 23,259 m<sup>2</sup> of the common heating area

## PROJECT TEAM

**Ievgeniia Rudnytska** ievgeniia.rudnytska@students.bfh.ch  
**Iryna Kilko** iryna.kilko@students.bfh.ch  
**Liliia Shvets** liliia.shvets@students.bfh.ch  
**Alexandra Deineka** alexandra.deineka@students.bfh.ch  
**Mykola Redko** mykola.redko@students.bfh.ch

## OBJECTIVES:

- ✓ Improve energy-efficiency and energy resilience of the hospital in Ukraine
- ✓ Reduce energy consumption
- ✓ Enable uninterrupted provision of the healthcare services by the following measures:
  - Insulation of the building
  - Installation of the roof-mounted solar power station
  - Update of the heating system with modern heat pumps
- Replicate the Project results across the country

## MAIN STAKEHOLDERS:

Joint Territorial Communities of Ukraine, Kalush City Council, Kalush Central District Hospital and other public buildings in Ukraine, NGOs

Swiss Hospitals and Medical Network, Architecture Bureaus, Academia and Research Centers, private business

International Finance and Development Organization, International Energy Agencies

## EXPECTED OUTCOMES:

- ▶ The hospital saves annually over CHF 211 590 of the energy costs due to the implemented measures
- ▶ Reduction in electricity consumption by 45% and 1600 tonnes of CO<sub>2</sub> emissions annually
- ▶ Medical facility is energy resilient and able to withstand and recover from power outages
- ▶ Transfer of the Swiss knowledge and best practices in energy-efficiency to Ukraine
- ▶ Renewable energy sources and energy-efficiency practices are more available and attractive to local municipalities

## ACKNOWLEDGEMENT

We thank to the State Secretariat for Economic Affairs SECO for supporting CAS Rebuild Ukraine Program. The Project Team would like to express their gratitude for the sponsorship that enabled their participation in the CAS Rebuild Ukraine provided by Mr. Andreas Erismann, Mr. Sandro Studer, Ms. Cornelia Gabriel, Mr. Martin Binkert.

