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On behalf of:



of the Federal Republic of Germany

# Renovations for an energy-efficient flagship project

Residents of an entire district in Lviv are set to benefit from renovated, attractive and well-heated homes

## The challenge: Inefficient energy consumption along the entire heating chain

Large parts of the Ukrainian population have to endure high heating costs. This is due to outdated cogeneration plants and distribution plants, an inadequate district heating network, poorly insulated or uninsulated buildings and inefficient heating systems that drive up energy consumption. The high costs affect poorer sections of the population in particular, who rely on social subsidies from the Ukrainian state to pay their bills.

The Ukrainian Government is seeking to harness the potential for more efficient energy use in buildings. To achieve this, buildings must undergo thermal renovation, but most apartment owners lack the financial means and technical expertise to make this a reality. The national Energy Efficiency Fund aims to provide assistance. Established in 2018 by the Ukrainian Government with the support of the European Union and the German Federal Ministry for the Environment, the fund creates financial incentives for renovation of residential buildings through better thermal insulation and modern heating systems, for example. Cutting down on energy consumption would decrease greenhouse gas emissions, reduce



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<b>Lead executing agency:</b>	Ministry of Regional Development, Construction, Housing and Communal Services of Ukraine (MinRegion)
<b>National partners:</b>	Lviv City Council/district heating utility LvivTeploenergo
<b>Overall term:</b>	October 2018 to September 2022
<b>Project area:</b>	Ukraine
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social energy subsidies and relieve the strain on public finances. However, the financial incentives are often insufficient, especially for the renovation of residential buildings in which a large proportion of residents receive subsidies. This is also true in the Ukrainian city of Lviv.

## Our approach: Energy efficiency – from producer to end consumer

On behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), GIZ is supporting Ukrainian municipalities in creating incentives for the renovation of residential buildings. To this end, a residential area in the district of Sykhiv in Lviv was selected in conjunction with the project partners for the implementation of renovation measures. The aim is to save as much energy and social subsidies as possible, and to improve the comfort of residents. As a first step, GIZ and Lviv City Council are reviewing the building stock, social structure and energy consumption in the district. Plans will then be made with homeowners for the thermal renovation of entire buildings. These will include the installation of façade insulation and new ventilation and heating systems that allow residents to regulate the temperature in their apartments.



Inspection of heating systems

The steps taken towards greater energy efficiency in the district of Sykhiv will conserve resources, ensure efficient energy consumption and reduce emissions in future. The experiences made by the project will serve as a frame of reference for Ukraine's Energy Efficiency Fund and for other towns in the region. The project will showcase the impact that can be achieved when financial incentives from the Energy Efficiency Fund are topped up by municipal incentives. Homeowner associations in Sykhiv will be made aware of options for financing energy efficiency measures and contribute to the renovation costs.



Renovated house façade



Recording heat loss using an infrared thermal camera



**Irina Maryunyak:**  
“We are investing today to make savings tomorrow”

Irina Maryunyak, Deputy Mayor of Lviv City, says:

## Our results: Pilot project highlights benefits

The energy needed to generate heat will be halved once work in the renovated buildings is completed. For residents, this means that they will only have to pay 50 per cent of their previous energy costs. The decrease in heating costs will also lead to a reduction in social subsidies, which in turn will relieve the strain on public finances and enable investments in other energy or climate change mitigation projects. In addition to cost savings, lower energy consumption will also cause less environmental damage and reduce CO<sub>2</sub> emissions.

The experiences made from renovating the heating infrastructure and buildings throughout Sykhiv district will be disseminated at the national level once the work is completed. This will highlight potential savings, facilitate the replication of work and enable documentation of the financial and environmental benefits of the various renovation measures. In the long term, the labour market can also be expected to benefit from the increased demand for renovation experts in the building sector.

*“We are looking forward to working with GIZ to realise this pilot project. We will gain experience that can then be used for projects throughout Ukraine. We are investing money today to make savings tomorrow thanks to the modern systems. We are therefore doing something positive for our residents who, as a result of the project, get to live in renovated, well-heated and attractive homes.”*

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On behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)