

Newsletter

"Comprehensive Energy-efficient Modernisation: Pilot Project in Kokshetau"

Introduction

Amid rising utility tariffs and the aging housing stock, Kazakhstan increasingly faces the need to shift from isolated repairs to systemic solutions. The building sector in Kazakhstan continues to grow, currently consuming 47% of all energy, of which 34% is used by residential buildings. The "Strategy for Achieving Carbon Neutrality of the Republic of Kazakhstan by 2060," adopted in 2023, places particular emphasis on building modernisation and improving energy efficiency.

Comprehensive energy-efficient modernisation of multi-apartment buildings is not simply the replacement of individual components; it represents a rethinking of the approach to major renovations. Unlike traditional major repairs, this format includes technical upgrading, reduced energy consumption, improved comfort, and extended building durability.

The pilot project under the German Society for International Cooperation (GIZ) FELICITY II program, implemented in Kokshetau, had a broader scope than just the comprehensive energy modernisation of a single building. Its goals also included establishing a sustainable model of interaction between residents, management companies, and municipal authorities, as well as identifying barriers to energy modernisation. The project was based on a strategy of continuous and open dialogue with all stakeholders, with particular focus on the residents of the pilot building.

Beginning of the dialogue and first steps of the project

In February 2025, activities of the pilot project were launched in Kokshetau. As part of the project, seminars were held with the participation of the Housing Initiative for Eastern Europe (IWO e.V.), the Kazakhstan Green Building Council (KazGBC) and the German Energy Agency (dena). **Seminars with management companies and homeowner associations (HOA)** identified key challenges and opportunities in the field of housing modernisation. At the same time, a **meeting with residents of the pilot building** was held and a **survey of residents was conducted** to monitor their attitude towards the project, their level of understanding of the energy efficiency of multi-apartment buildings and their willingness to provide funding.



These activities laid the groundwork for further dialogue and identified stakeholders at the building and city levels.

Deepening cooperation: Event series in Kokshetau



IWO's visit in March 2025 represented the next phase in the project's development. IWO prepared a program of activities for various stakeholder groups involved in the modernization process and coordinated the participation of all partners and international experts. During a **training seminar for management companies** and boards of homeowner associations, dena, responsible for the pilot project's energy concept, and the planning office "ArchiKom", the project's designer, presented the main activities and key design features. IWO shared the results of the residents' survey, while Baltic experts – long-term partners of IWO – discussed the prerequisites that must be created at both national and local levels to enable large-scale modernisation of the residential building stock. A **round table with representatives of the Akmola region and the city of Kokshetau** provided an opportunity to discuss the

tasks of local executive bodies in supporting homeowners. An IWO expert presented the German model of an urban modernisation operator (dt: Sanierungsträger) and the role of the MFH (multi-family houses) modernisation manager in organising the entire process. Such a manager and urban operator are key players in helping apartment owners implement a complex project involving energy-saving measures.

During the event with representatives of the pilot building's council, special focus was placed on the key construction activities outlined in the design documentation and on lessons learned from the Baltic countries. Experts from Vilnius shared examples of multi-family houses modernisation, addressing technical, financial, organizational, social, and communication aspects. This experience is particularly relevant for Kazakhstan given the similarities in the aging building stock and the initial housing privatization process of the 1990s.

Preparing to make the first decisions

In March 2025, IWO and dena developed an [info sheet](#) for residents, which shows the condition of the building before and after modernisation. It contains a description of the structural elements, engineering systems and planned improvements. This information sheet familiarised residents with the main planned measures and the further course of the project.

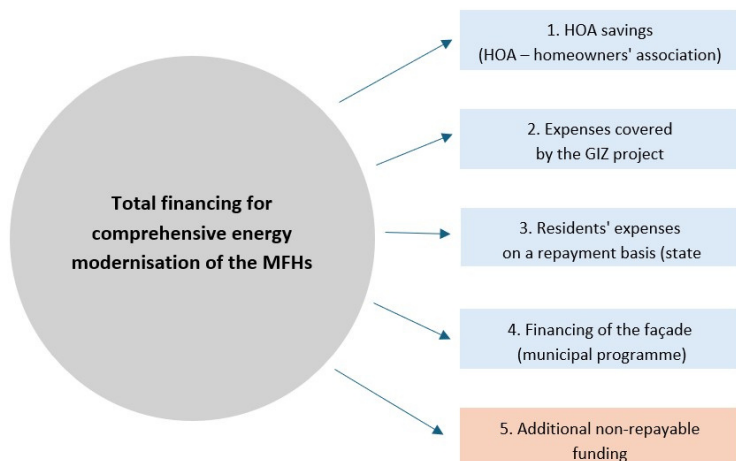


To prepare residents for the meeting that would determine the project's transition to the construction stage, the key resource was the August-completed booklet "[Information Materials on Comprehensive Energy-Efficient Modernisation of MFH](#)". It was developed during regular meetings with pilot project partners and the building's homeowners' association board. It contains:

- list of main construction activities from the design and estimate documentation: facade insulation, window replacement, modernisation of engineering systems, installation of heating control depending on the outside temperature, modernisation of water supply and ventilation;
- the preliminary total cost of the comprehensive energy modernisation project, depending on the facade option, were: 614,994,549 ₸ ('wet' facade) or 765,963,388 ₸ (ventilated). The final cost of the project will be determined based on the results of a state expert review;
- approximate estimated costs per square metre for each flat: 796 ₸ with a 'wet' façade and 992 ₸ with a ventilated façade. The total cost per flat can only be calculated after the final approval of the overall estimate based on the area of each flat specified in its technical passport;
- For discussion: the contribution of apartment owners to the state programme for the modernisation of the MFH: a loan of 216 million ₸ for 15 years with a monthly payment per apartment ranging from 10 to 23 thousand ₸ per month, depending on its area.
- the intention of the main partners of the pilot project – GIZ and the Kokshetau City Administration – to seek additional sources of funding.

The financing scheme below shows that the overall project cost consists of several elements, with the most important being the residents' co-financing of their building's modernisation. For the pilot building, this contribution could come through participation in the state capital-repair program (a repayable loan) and through the homeowners' association's own funds.

It should be noted that within the framework of the project, the international partner GIZ covered part of the necessary expenses for preparing the technical inspection of the building, conducting the energy audit, developing the design documentation, and undergoing the state expert review.



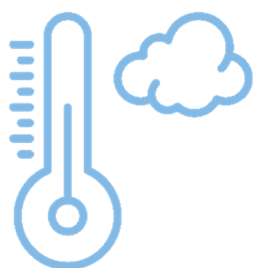
If the project enters the construction phase, GIZ is ready to fund both design author supervision and technical quality control.

In most modernisation projects, these expensive costs are borne by the residents, which underscores the importance of the international partner's role in this project.

The design documentation shared with the residents of the pilot building included a package of measures to enhance the building's energy efficiency. All proposed solutions were tailored to the building's technical condition, the regional climate, and existing legal requirements. **The modernisation will include:**

- insulating the exterior walls with mineral wool, with two possible finishes — a ventilated façade or a "wet" façade system;
- replacing the soft roofing and insulating the attic slab to reduce heat loss from above;
- upgrading the building's engineering systems — heating, water supply, sewerage, ventilation, and electricity — everything essential to the building's reliable operation;
- fully replacing all apartment and stairwell windows with modern double-glazed units;
- insulating the basement ceiling to protect against cold and improve energy efficiency on the lower level of the building;
- modernizing the heat distribution unit, including reconstruction of the floor;
- removing old balconies and installing new glazed structures with a modern design;
- renovating the entrances and installing a ramp for residents with limited mobility.

The booklet with the materials was distributed both electronically and in print, allowing every homeowner to familiarize themselves with the details in advance and prepare for the discussion.



Formal meeting of the homeowners

On 13 September 2025, the first official meeting of the residents of the pilot building was held. The key topics included reviewing the design documentation, the terms of participation in the state capital-repair program, and the potential for securing additional funding (see the agenda in the "Information Materials on Comprehensive Energy-Efficient Modernisation of MFH"). Representatives of IWO, GIZ, dena, and the architectural firm ArkhiKom **presented the case for carrying out the comprehensive project**, outlined the technical solutions, explained the preliminary cost estimate, and discussed options for supporting socially vulnerable residents.

The results of the vote demonstrated the reality

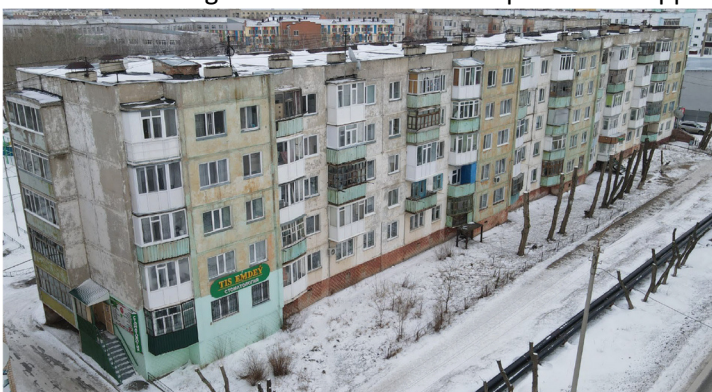
Several differing views were voiced at the meeting, and the key agenda items could be discussed only with a small number of apartment owners who were present. As there was no quorum, voting on the agenda was carried out through an apartment-by-apartment survey. The outcome showed that most owners rejected the proposed comprehensive energy-efficiency modernisation of their building. This voting stage was particularly significant, as it marked the residents' first formal decision-making experience on participation in a comprehensive energy-efficiency upgrade. Throughout the pilot project, differences in owners' expectations and approaches have become evident. This is partly due to issues of long-term financing and the need to develop sustainable mechanisms to support energy-saving measures.

These pilot projects should not be financed solely by the residents; broader support is needed to create “best practice” examples that can guide the future rollout of housing modernisation. Additional financial assistance is absolutely crucial! Active engagement by local authorities and clear communication with residents are important factors for success. Building residents’ trust and supporting them as early adopters of energy-efficient modernisation is essential. Regardless of the voting outcome in the pilot building, the experience gained is extremely valuable for advancing thermal modernisation of apartment buildings in Kokshetau and other regions of Kazakhstan.



Conclusions and recommendations for the implementation of a pilot project

For those seeking to initiate a similar comprehensive approach in their city:



- **Continuous communication among all project partners is the cornerstone of trust and coordination.** Full engagement from each partner prevents misunderstandings and reinforces the legitimacy of the process.
- **Clear distribution of responsibilities among all stakeholders ensures sustainability.** When residents, municipal authorities, and technical experts understand their roles and contributions, the project becomes a collaborative effort rather than an externally driven initiative.

- **Resident involvement from the outset is a strategic imperative, not a formality.** Early engagement increases owners’ motivation and willingness to co-finance.
- **Communication with apartment owners should be phased and delivered through multiple channels.** Clear, visually structured materials enable residents to make informed decisions.
- **Joint development of informational products fosters cohesion among partners.** Working together on materials, presentations, and briefings enhances transparency and establishes a shared vision of objectives and expected outcomes.
- **Additional financial support is essential for successful pilot projects.** Since dedicated programs for comprehensive modernisation do not yet exist in Kazakhstan, pilot projects must be supported with extra funding.



In summary, the success of comprehensive energy-efficient modernisation of apartment buildings depends on a robust financing framework, combining state capital-repair programs, a mix of bank loans and government subsidies, and support for vulnerable residents. Further work is still required in this area!

The information bulletin was developed by the Housing Initiative for Eastern Europe (IWO e.V.) within the framework of the GIZ project "Eastern Partnership and Central Asia Program (FELICITY II)". Its content is the sole responsibility of the authors and does not necessarily reflect the views of GIZ.