



Energy Dialogue
Germany – Central Asia



Round table

"IMPROVING ENERGY EFFICIENCY OF REAL ESTATE FUND — BUSINESS OPPORTUNITIES"

Date: 06 October 2024, 9:00 a.m. - 2:00 p.m.

City: Astana

Place: Astana Chamber of Entrepreneurs, B. Momysheva 2/1

Language: Russian and German (with translation)

Round table Summary:

On 06 November 2024, a Round Table was held in the Chamber of Entrepreneurs "Atameken" in Astana in the framework of the Energy Dialog between the Governments of Kazakhstan and Germany with the support of the Ministry of Industry and Construction of the Republic of Kazakhstan. The event continued the dialogue on improving energy efficiency of buildings: new construction and modernisation, which was started on 18.10.2024 at the conference in Astana (summary of the conference in the annex).

Chairperson: Director of the Astana Chamber of Entrepreneurs – **Alin, Kanat**

Moderator: Deputy Chairman of the Sectoral Council 'Construction and Land Relations' of the Astana Chamber of Entrepreneurs – **Lazarev, Vyacheslav**.

After welcoming addresses from **Kanat Alin** and **Thilo Cunz**, Head of Department "Buildings International", German Energy Agency (dena), Berlin, Germany the report "Information on modernisation of housing stock and development of housing and communal infrastructure of Astana" was given (Tugyzbayev B.A. "Örken kala" LLP).

Sergey Khudyakov, Chairman of the Petropavlovsk Regional Association of Apartment Owners' Cooperatives made a presentation "Analysis and results of the Housing Modernisation Programmes in the Republic of Kazakhstan". Main conclusions: repair rates are low. From 2011 to 2023 — 3,550 (multi-family housings) MFHs have been renovated, about 18,000 MFHs are in need of refurbishment. At this rate of repair it will take 50 years; no modernisation of the MFHs, only implementation of individual measures for the repair of houses, weak urban structures - renovation operators. The modernisation programme does not provide for implementation of energy measures.

Presentation "ESCOs as a tool for financing energy efficiency measures" — **Alma Alzhanova**, Deputy Director of the Department of Energy Saving Policy Development, Institute of Electricity and Energy Saving Development, Astana, Kazakhstan. The speaker gave a concept of business model of energy service company, the principle of ESCO. Business sees this mechanism as one of the solutions for modernisation of buildings. But there are a number of legislative problems and further development of experience in ESCO projects is required.

Saken Makhambetov, Chairman of "Association of management entities, services and energy service in housing sector", "Shanyrak", Astana, Kazakhstan presented in his speech the concept of Project Office mechanism as a modern tool of strategic development for the topic "Energy saving in buildings". He continued the discussion started at the Conference on 18.10. in Astana on the formation of a targeted policy on this topic. The Project Office implies first of all a responsible structure, a structure operating in accordance with modern rules of effective management.

In the presentation "Energy Financing for Low Carbon Investments — pilot project in Kokshetau", **André Fabian**, Felicity II Project Manager, German International Cooperation Organisation GIZ, Berlin, Germany spoke about the importance of energy efficiency in buildings in the context of climate protection, presented the FELICITY II project and the energy refurbishment of a residential building in Kokshetau.

In the presentation "Urban Transition - international cooperation in the buildings sector. Decarbonisation of buildings", **Dr.-Ing Gulzhan Tleukenova**, Head of Energy Efficient Buildings Group, Buildings International, German Energy Agency (dena), Berlin, Germany, outlined all the main instruments, approaches for the roll-out of large-scale modernisation of the housing stock.

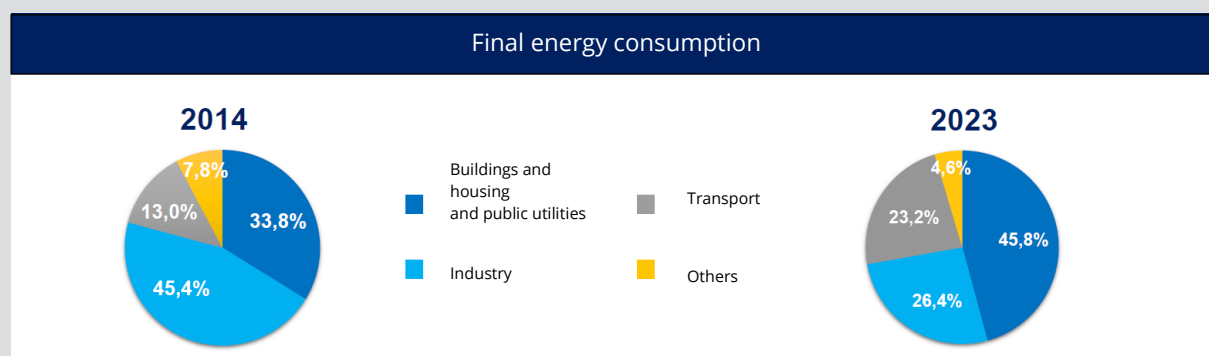
Larissa Schreckenbach, ENABLE Project Manager, Housing Initiative for Eastern Europe (IWO e.V.), Berlin, Germany / PROMHOUSE Project Manager, Housing Initiative for Eastern Europe, Berlin, Germany formulated in her presentation concrete proposals (see below) to address the challenges of large-scale energy modernisation of buildings for cities.

Thilo Cunz, Head of Department "Buildings International", German Energy Agency (dena), Berlin, Germany presented an interactive map as an example of a modernisation tool. The "Interactive Map of Energy Efficiency of Buildings in Kazakhstan" is an example of how data on energy consumption in buildings can be collected and spatially distributed to demonstrate the potential for energy and CO2 savings. The current state of the map serves as an example and a basis for discussion of possible future development.

The question is which organisation in Kazakhstan will adopt this tool, developed by dena for Kazakhstan, and will take care of its further development and completion.

ROUNDTABLE PROPOSALS FOR IMPROVING ENERGY EFFICIENCY IN BUILDINGS:

45, 8 % final energy consumption in buildings and communal services out of total energy consumption: This is significant! The most difficult task in this sector — is energy efficient modernisation of multi-family residential buildings with a high share of privatised flats (see Summary of the International Conference, 18.10.2024, Astana).



Source: presentation of JSC "Institute for Development of Electric Power Industry and Energy Saving" at VI Energy Saving Forum, 07.11.2024, Astana, Kazakhstan

To unite efforts of business, professional and civil society to form a targeted policy on energy efficiency in buildings, in particular energy modernisation of buildings and, first of all, housing stock. Lobby jointly for the creation of a Project Office as a tool for strategic development, which implies the existence of a structure responsible for energy efficiency in buildings (new construction, modernisation) and complies with modern rules of efficient management

(Addressing the challenge of energy efficiency in buildings — from above)

(Addressing the challenge of improving energy efficiency in buildings — from below)

Active cities interested in improving their residential modernisation programmes and introducing energy saving measures in them based on the best international practices of Western and Eastern Europe and Baltic countries are invited to discuss the roadmap for practical introduction of energy saving measures for modernisation of buildings / multi-family residential buildings (MFH). These are primarily the cities — Astana and Almaty, and others with financial potential to implement new experience.

Roadmap for practical implementation of energy saving measures during the modernisation of the MFH — pilot programmes of cities

- setting specific targets based on country commitments to decarbonisation (e.g. refurbish 10, 20, ... buildings / residential buildings and reduce their heat consumption by 30% or more by 2025-27)
- analysing the current situation of the selected buildings
- building typology, classification
- identifying a set of construction and energy saving measures (light, medium and complex packages)
- optimising the feasibility of measures (from the planning stage)
- construction (quality control)
- verifying compliance of planned and achieved energy savings (certification / verification / monitoring)

Interested cities are working within the framework of pilot programmes for energy refurbishment of multi-family residential buildings, including an optimised financial scheme. Cities should be prepared to find additional funding to support energy saving measures within such pilot programmes in order to motivate and support buildings that decide to participate in the pilot programme.

Based on the results of the pilot programmes for energy modernisation of the MFH, cities will receive:

- practical projects: planning, construction implementation, control
- experience in establishing professional work with homeowners (informing and organising projects)
- information on market readiness: availability of technologies and materials of appropriate quality
- information on which competences local companies need to develop
- review of what changes / improvements need to be made to legislation and building codes
- a realistic idea of the costs of projects, on the basis of which recommendations will be made for a national programme for financing the modernisation of the housing stock

Three international initiatives in Kazakhstan on the topic of energy saving in buildings

- Eastern Partnership and Central Asia FELICITY II Programme (GIZ) / GIZ Kazakhstan
- FELICITY II — Eastern Partnership and Central Asia Programme
- Energy Dialogue Germany — Central Asia (dena) / Energy Dialogue Kazakhstan-Germany (dena)
- ENABLE — Empowered Civil Society for a Sustainable and Efficient City (EU Project)

can support the development of a roadmap and further actions to implement pilot programmes for the energy modernisation of the MFH.

Support for working groups:

- pilot project on energy modernisation of a residential building in Kokshetau (FELICITY II, dena) — organisation and implementation of the project in all phases: initiation, energy audit, design, construction, quality control, monitoring / verification of results — information events, brochure
- training programme on energy efficiency in buildings / energy efficiency refurbishment (see slides below) — experience from Western / Eastern Europe and Kazakhstan (ENABLE)
- study tour to Lithuania (familiarisation with the work of municipalities on energy saving modernisation of MFH) and two concept development workshops (one in Lithuania / one in Kazakhstan) (ENABLE)

Recommendations for the formation of working groups:

- representatives of local authorities responsible for maintenance, modernisation, energy saving in the MFH
- representatives of the professional community (business) — Association of builders, developers, energy auditors, managers, and service providers of the housing stock
- representatives of CSOs (civil society organisations)

