



Conference on

“Unveiling Market Opportunities for Boosting Residential Energy Efficiency and Alleviating Energy Poverty”

jointly organized by

Habitat for Humanity Armenia, United Nations Economic Commission for Europe (UNECE) and United Nations Development Programme (UNDP) in partnership with United States Agency for International Development and Habitat for Humanity International

9-11 March 2022

Panoramic Hall, Ani Grand Hotel, Yerevan, Armenia

Background information:

The residential sector is one of major consumers of energy in Armenia, according to the 2020 Energy balance. It comprises 33% of total energy consumed. Rising fuel prices will substantially reduce affordability of low-income customers to heat their apartments. According to UNECE research, at least 30% of population in the country can be considered energy poor.

The Government of Armenia is trying to support the social vulnerable groups through cross-subsidies, however in longer terms the improvement of energy performance of public and residential buildings does not have alternative.

Habitat for Humanity Armenia in partnership with USAID has been implementing “Residential Energy Efficiency for Low Income Households” (REELIH) project targeted at creating enabling environment for investments in residential energy efficiency and helping to reduce energy poverty in the country. It is a part of bigger project which was initiated by Habitat for Humanity International and USAID in Macedonia, Bosnia and Herzegovina and in Armenia.

In Armenia the project has been implemented since 2013. Project activities focus on creating market drivers for residential energy efficiency through increasing the capacities of homeowner associations, creating and testing different financial mechanisms, engaging in policy dialogue with key stakeholders targeted at betterment of law on residential buildings management and increasing the awareness level of tenants on energy efficiency and energy saving measures in the buildings.

UNDP in Armenia is implementing “De-Risking and Scaling-up Investment in Energy Efficient Building Retrofits” Project (2017-2023) funded by the Green Climate Fund (under coordination of the Ministry of Environment of the Republic of Armenia).

The Project seeks to systematically de-carbonise the existing building stock in Armenia to reduce greenhouse gas (GHG) emissions through creating a favourable market environment and scalable business model for investment in energy efficiency retrofits.

Project activities focus on increasing capacities at local level for community energy management, developing energy passports/certificates for retrofitted buildings, adaptation of standards on buildings energy characteristics, providing support to the working group working on amendments of the law on management of multi-apartment buildings, developing residential and public buildings passport forms, operation and maintenance rules for multi-apartment buildings, developing a system of indicators for “energy efficient behaviour”, conducting survey on

households' heating behavior (2020), ensuring technical assistance to “Yerevan Energy Efficiency” (EIB/E5P) cooperating with the RA Ministry of Territorial Administration and Infrastructure in the frame of the State Subventions Program on promotion of energy efficient reconstruction of MABs and public buildings.

The mentioned projects helped to identify a number of gaps and obstacles which need to be addressed and solved via systematic discussions and cooperation with government and key stakeholders, as well as via analysing and adopting the experience of other countries that faced similar problems and created systems to manage those.

UNECE is implementing the project “Enhancing National Capacities to Develop and Implement Energy Efficiency Standards for Buildings in the UNECE Region.” The project’s expected accomplishments include: (i) improved knowledge of advanced energy efficiency standards in buildings in the UNECE region by UNECE member States; (ii) enhanced and up-to-date network of experts from public and private sectors on energy efficiency in buildings in the UNECE region; (iii) strengthened capacity of national authorities, building sector professionals, homeowner associations and other relevant stakeholders to develop and implement advanced energy efficiency standards in buildings and introduce energy efficient technologies at the national and sub-national levels.

The project conducted a study on gap analysis between the performance objectives set forth in the Framework Guidelines for Energy Efficiency Standards in Buildings and current energy efficiency standards and their implementation in the countries of South-Eastern and Eastern Europe, the Caucasus, Central Asia, and in the Russian Federation. Three national studies in Armenia, Kyrgyzstan and the Republic of Moldova with a more detailed gap analysis have also been developed. The project established a Collaborative Environment for Experts on Energy Efficiency in Buildings in the UNECE region and updated the network of experts from public and private sectors on energy efficiency in buildings. The national training seminars on high-performance energy efficiency standards in buildings were organized in Armenia and Kyrgyzstan.

The project “Global Initiative towards post-Covid-19 resurgence of the MSME sector” is also implemented by UNECE and led by UNCTAD and UN ESCWA. The overall goal of the project is to strengthen the capacity and resilience of micro-, small and medium enterprises (MSMEs) in developing countries and economies in transition to mitigate the economic and social impact of the global COVID-19 crisis. In the framework of the project, the Guidelines and Best Practices for MSMEs have been developed to assure resiliency and progress towards a circular economy in sustainable resource management and critical raw material supply chain solutions and Guidelines and Best Practices for MSMEs in delivering energy efficient products and in providing renewable energy equipment. The reports are used for online training courses as well as to customize their findings for several pilot countries in the UNECE region.

We believe that this conference will serve as a good platform to discuss the above mentioned issues. During the conference experts from different fields both from Armenia and Western Balkans and other countries will present their expertise with the key highlights on solutions for creating enabling mechanisms and systems for renovation and thermal retrofitting of residential buildings on a sustainable way contributing to the energy poverty reduction.

Purpose:

The conference aims to explore the key market drivers for scaling up investments in energy efficiency in multi-apartment buildings which lead to alleviation of energy poverty through exchange of information and knowledge transfer from Eastern European countries; share the expertise of homeowner associations supporting mechanisms, bring important issues for discussion from policy perspectives till financial & technical solutions.

Audience:

The conference is intended for decision makers, stakeholders and practitioners engaged in residential energy efficiency sector.

Participants may include key representatives from government and communities, policymakers, international organizations, non-governmental organizations, financial institutions, donor agencies, housing finance organizations, technology companies.

Objectives:

Enabling policy reforms: promote policies, projects and practices that create enabling legal environment for the renovation and maintenance of multi-apartment stock.

Access to finance: identify financial mechanisms that provide sustainable and scalable access to finance for the energy upgrade of residential buildings.

Energy poverty reduction tools: showcase and discuss tools and system changes that support Home Owners Associations (HOAs) to implement energy efficiency measures in residential buildings, thus contributing to energy poverty alleviation.

Wednesday, 9 March	
12:00 – 12:25	<p>Welcoming remarks</p> <ul style="list-style-type: none">• Mr. Armen Ghularyan, Chairman of the Urban Development Committee• Mr. Konstantin Sokulskiy, Deputy Resident Representative, UNDP Armenia• Mr. Rick Hathaway, Vice president, Habitat for Humanity International• Mr. John Allelo, USAID/Armenia Mission Director• Mr. Oleg Dzioubinski, Regional Adviser, Sustainable Energy Division, UNECE
12:25 – 13:45	<p>Session 1. Creating market drivers for promoting residential energy efficiency</p> <p><i>The right policies, legal reforms, access to finance, capacities of communities and residential buildings' management bodies and other important factors play a key role in boosting residential energy efficiency market. This is evidenced by residential energy efficiency project experiences in Armenia, Macedonia and Bosnia and Herzegovina, Estonia and Central- and Eastern European countries.</i></p> <p>Moderator - Ms. Zita Kakalejcikova, Manager, Residential Energy Programs, Europe, Middle East and Africa, Habitat for Humanity International</p> <ul style="list-style-type: none">• REELIH Macedonia – Energy efficient renovation of multi-apartment buildings in Macedonia <i>Ms. Liljana Alceva, Deputy Director, Habitat for Humanity Macedonia</i>• REELIH Bosnia and Herzegovina - MAB energy mapping and full thermal retrofitting experience <i>Mr. Jasmin Gabela, Executive Director, ENOVA</i>• REELIH Armenia – Energy refurbishment of MABs: market gaps and financial models <i>Ms. Varsenik Khloyan, REELIH Project Manager, Habitat for Humanity Armenia</i>• UNDP Armenia's experience in full retrofitting of MABs: financial modality <i>Mr. Vahram Jalalyan, Project Coordinator, UNDP Armenia</i>

	<ul style="list-style-type: none"> • Supporting homeowners in energy efficient refurbishment in Central- and Eastern European countries <i>Mr. Johann Stresse, Project Director, Housing Initiative for Eastern Europe, IWO e.V.</i> • Energy Efficiency in Buildings, Alleviating Energy Poverty in Estonia and Empowering Apartment Associations <i>Mr. Andres Jaadla, Member of UNECE Real Estate Market Advisory Group (REM); Chairman of the Management Board, Estonian Union of Co-operative Housing Associations</i>
13:45 - 14:00	Questions and answers
14:00 – 15:00	Lunch break
15:00 – 16:00	<p>Session 2. Policy discussions: GAP analysis and reform of legislations related to residential buildings management and HOAs</p> <p><i>Legal-regulatory barriers, particularly connected with the liabilities of homeowners towards common property, enforcement mechanisms for collection of MAB maintenance fees, collective decision-making and legally securing loans taken by HOAs, hinders investments in MABs. The formation of effective reforms in the housing sector via analysing and adopting best practices from countries that have successfully implemented similar reforms can play essential role in the maintenance and management of housing stock. This session will present gap analysis of the housing sector in Western Balkan countries and the case study of Slovakia in introducing legal reform of the housing sector, as well as maintenance funds for EE renovations of MABs and creation of professional housing management system in Slovakia.</i></p> <p>Moderator - <i>Ms. Varsenik Khloyan, REELIH Project Manager, Habitat for Humanity Armenia</i></p> <ul style="list-style-type: none"> • Financial gaps of the housing sector in Western Balkan countries <i>Ms. Elena Milanovska, Associate Director, Capital Markets and Financial Inclusion, Terwilliger Center for Innovation in Shelter, Habitat for Humanity International</i> • Institutional and policy gaps of the housing sector in Western Balkan countries <i>Ms. Astghine Pasoyan, Director, Energy Saving Foundation</i> • Legal reform of the housing sector in Slovakia; Maintenance funds for EE renovations of MABs; Professional housing managers <i>Ms. Elena Szolgayova, Co-Chair Housing 2030</i>
16:00 - 16:15	Questions and answers
16:15 - 16:30	Discussion and wrap-up of day one

Thursday, 10 March	
	Training Workshop on “Guidelines and Best Practices in Armenia for Micro, Small and Medium Enterprises in delivering energy efficient products and in providing renewable energy equipment”
10:00-10:20	Welcoming remarks <ul style="list-style-type: none"> • Ms. Ani Ispiryan, Deputy Minister of Economy of Armenia • Mr. Oleg Dzioubinski, Regional Adviser, UNECE Sustainable Energy Division
Photo with participants	
10:20-10:50	Session on Effects of COVID-19 crisis on MSMEs and on support available to MSMEs Guidelines and Best Practices for Micro-, Small and Medium Enterprises in Armenia in Delivering Energy-Efficient Products and Providing Renewable Energy Equipment <i>Mr. Suren Shatvoryan, UNECE Consultant, Armenia</i>
10:50-11:25	Open Discussion, Q&A
11:25-11:30	Wrap-up and Conclusions <i>Mr. Oleg Dzioubinski</i>
11:30-12:00	Coffee break
12:00-13:15	Session 3. Energy poverty alleviation through implication of financial tools that support and scale up residential buildings renovations and energy upgrades
	<p><i>Financial schemes leading to deep renovation programs play fundamental role in combatting energy poverty. Research done by Metropolitan Research Institute and Buildings Performance Institute points out the energy poverty situation in Central-Eastern European and South-East European regions, various indicators that capture all relevant aspects of energy poverty and policy instruments that help to eliminate energy poverty. This session will present research findings on energy poverty, existing financial mechanisms and products that provide access to finance for MAB renovations, possibilities of mobilizing funds into residential energy efficiency sector, as well as showcase how the commitment and engagement of municipalities in EE programs support energy upgrade and maintenance of multi-apartment stock.</i></p> <p>Moderator: <i>Ms. Elena Milanovska, Associate Director, Capital Markets and Financial Inclusion, Terwilliger Center for Innovation in Shelter, Habitat for Humanity International</i></p> <ul style="list-style-type: none"> • Research findings on energy poverty <i>Ms. Hanna Szemzo, Managing Director, Metropolitan Research institute</i> • Heating Poverty indicators: based on MABs' Survey 2020 <i>Ms. Astghik Mirzakhanyan, UNDP Armenia</i> • HOAs lending experience with guarantee scheme <i>Mr. Aram Mkhitarian, Executive Director "Agroleasing Leasing Credit Company" LLC</i> • Bottlenecks in financing renovations in UNECE countries <i>Mr. Oleg Dzioubinski, Regional Adviser, Sustainable Energy Division, UNECE</i>

13:15 - 13:30	Questions and answers
13:30 - 14:50	Lunch break
14:50 - 16:30	<p>Session 4. Improved management of buildings through buildings' data availability, digitalization and professional housing management system.</p> <p><i>Establishment of MAB professional management system and an updated data management system can play a significant role in improving maintenance and management of residential buildings.</i></p> <p><i>Building energy passports and energy performance certificates (EPCs) are one of the key instruments to support the maintenance and long-term decarbonisation of the building stock. A well-functioning EPCs are necessary to help homeowners make informed decisions, they can facilitate building trust and motivating investment in energy saving measures.</i></p> <p><i>Availability of buildings energy data is also a guiding instrument for developing policies and financial support schemes and monitoring their impact. Data availability through digitalization enables progress toward continuous energy efficiency improvements and improved management of the buildings.</i></p> <p><i>This session demonstrates how EPCs, buildings passports and digitalisation can serve as information tools to facilitate MABs management bodies, building owners, policy-makers and the finance and business sectors in boosting energy efficiency renovations.</i></p> <p><i>Moderator: Mr. György Sümeghy, Associate Director of Advocacy and Policy, Habitat for Humanity International</i></p> <ul style="list-style-type: none"> • Case study on data solutions for energy efficiency in buildings <i>Ms. Alisa Freyre, Data & Digital solutions expert, PAN DATA GmbH</i> • The role of EPCs and building renovation passports in stimulating energy retrofitting of the buildings <i>Mr. Jonathan Volt, Project Manager, BPIE</i> • Passportization of buildings, energy passports <i>Mr. Andre Ohanyan, Mr. Vahram Jalalyan, UNDP Armenia</i> • Improving efficiency of buildings through digitalization <i>Mr. Igor Litvinyuk, Economic Affairs Officer, UNECE Sustainable Energy Division</i> • Residential buildings management sector policy reform in Armenia <i>Ms. Tanya Arzumanyan, Head of Housing Stock Management and Communal Infrastructures Department, RA Urban Development Committee</i> • Buildings' digitalization and promotion of professional housing management in Kazakhstan and Uzbekistan <i>Ms. Larissa Schreckenbach, Project Director, IWO e.V</i>
16:30–16:45	Questions and answers
16:45-17:00	Discussion and wrap-up of day two

Friday, 11 March	
10:00 - 13:00	<p>Workshop: Best practices to address the issues of energy efficiency in buildings and their implementation in the UNECE member State</p> <p><i>Improving energy efficiency in buildings is one of the most cost-effective options for meeting growing energy demand and reducing greenhouse gas emissions in most countries. This workshop will present findings of the regional and national studies on implementation of energy efficiency standards in the countries, results of the trainings on high-performance energy efficiency standards in buildings, activities to enhance network of experts from public and private sectors on energy efficiency in buildings in the UNECE region. The workshop will particularly discuss how the developed best practices and guidelines can be better implemented to address the issues of energy efficiency in buildings in the UNECE member States.</i></p>
10:00 – 10:15	<p>Welcoming remarks</p> <p><i>Mr. David Grigoryan, Deputy Chairman, Urban Development Committee of Armenia</i></p> <p><i>Mr. Oleg Dzioubinski, Regional Adviser, UNECE</i></p>
10:15-11:40	<p>Enhancing National Capacities to Develop and Implement Energy Efficiency Standards for Buildings in the UNECE Region</p> <p>Moderator: <i>Mr. Vahram Jalalyan, Project Coordinator UNDP-GCF; Co- Chair, Joint Task Force on Energy Efficiency in Buildings</i></p> <ul style="list-style-type: none"> • Regional and national studies on gap analysis between the performance objectives set forth in the Framework Guidelines for Energy Efficiency Standards in Buildings and Implementation of Current Energy Efficiency Standards <i>Ms. Nadejda Khamrakulova, Project Officer, UNECE</i> • Panel discussion on implementation of recommendations from the regional and national studies <i>Ms. Ruzan Adamyan, Head of Construction and Normative Department, Urban Development Committee of Armenia</i> <i>Mr. Maksat Amiraev, Head of Department of Development and Monitoring of Housing and Communal Services, State Agency of Architecture, Construction and Housing and Communal Services, Kyrgyzstan</i> <i>Mr. Nicolae Magdil, Lead Consultant, Energy Policy Department, Ministry of Infrastructure and Regional Development, Republic of Moldova</i> <i>Ms. Ani Rafyan, UNECE Consultant / Mr. Andre Ohanian, Energy Expert</i> <i>Mr. Sergiu Robu, UNECE Consultant</i> <i>Mr. Mikhail Toropov, UNECE Consultant</i> • National training seminars on high-performance energy efficiency standards in buildings in Armenia, Kyrgyzstan and the Republic of Moldova <i>Mr. Matija Vajdic, UNECE Consultant</i> • Collaborative Environment for Experts on Energy Efficiency in Buildings in the UNECE Region <i>Ms. Nadejda Khamrakulova, Project Officer, UNECE</i>

	<ul style="list-style-type: none"> • Evaluation of the project “Enhancing National Capacities for Development and Implementation of the Energy Efficiency Standards in Buildings in the UNECE Region” <i>Ms. Nelly Dolidze, Evaluation Expert</i> • Draft impact assessment on how to better implement best practices and guidelines developed by UNECE activities to address the issues of energy efficiency in buildings <i>Ms. Lisa Amend, UNECE</i>
11:40 - 12:00	Coffee break
12:00 - 12:50	<p>Panel discussion on best practices and guidelines to address the issues of energy efficiency in buildings and their implementation in the UNECE member States</p> <p>Moderator: <i>Mr. Oleg Dzioubinski, Regional Adviser, UNECE</i></p> <p><i>Mr. Vahram Jalalyan, Project Coordinator UNDP-GCF; Co-Chair, Joint Task Force on Energy Efficiency in Buildings</i></p> <p><i>Mr. Kostiantyn Gura, Chair, Group of Experts on Renewable Energy; Co-Chair, Group of Experts on Energy Efficiency</i></p> <p><i>Mr. Andres Jaadla, Member of UNECE Real Estate Market Advisory Group (REM); Chairman of the Management Board, Estonian Union of Co-operative Housing Associations</i></p> <p><i>Mr. Igor Litvinyuk, Energy Efficiency Programme Officer, UNECE</i></p> <p><i>Mr. Aleksandar Dukovski, Senior Energy Expert</i></p> <p><i>Mr. Alexey Tulikov, Head of the Directorate for the Development of Legislation in the Fuel and Energy Sector, Russian Energy Agency</i></p> <p><i>Mr. Romanas Savickas, Senior Advisor, UNEP-CCC, Copenhagen Climate Centre</i></p>
12:50 - 13:00	<p>Wrap-up and way forward</p> <p><i>Mr. Oleg Dzioubinski, Regional Adviser, UNECE</i></p>
13:00 - 14:00	Lunch break
14:00 - 16:00	<p>Workshop: Outcomes of the project “Global Initiative towards post-Covid-19 resurgence of the MSME sector: Guidelines and Best Practices for MSMEs in delivering energy efficient products and in providing renewable energy equipment”</p> <p><i>This workshop will present activities of the UN Development Account project “Global Initiative towards post-Covid-19 resurgence of the MSME sector”, including findings of the regional and national Guidelines and Best Practices for MSMEs in delivering energy efficient products and in providing renewable energy equipment and results of the training workshops. The workshop will serve as a platform for pilot countries and other UNECE member States for exchange of experience and sharing best ways to support MSMEs working in the area of energy efficiency and renewable energy in the current economic and social conditions.</i></p>
14:00 - 14:15	<p>Overview of project “Global Initiative towards post-Covid-19 resurgence of the MSME sector: Guidelines and Best Practices for MSMEs in delivering energy efficient products and in providing renewable energy equipment”</p> <p><i>Mr. Oleg Dzioubinski, Regional Adviser, UNECE</i></p>

14:15 - 14:30	<p>Guidelines and Best Practices for MSMEs in delivering energy efficient products and in providing renewable energy equipment: Regional Perspective</p> <p><i>Mr. Vitaly Bekker, Energy Expert</i></p>
14:30 - 15:30	<p>Panel discussion and exchange of experiences on measures to support MSMEs working in the area of energy efficiency and renewable energy on implementation of recommendations in the current economic climate</p> <p><i>Nationally customized Guidelines and Best Practices for MSMEs will serve as a basis for this discussion.</i></p> <p>Moderator: <i>Mr. Aleksandar Dukovski, Senior Energy Expert</i></p> <p><i>Ms. Lusine Stepanyan, Adviser to MSME Department, Ministry of Economy of Armenia</i></p> <p><i>Mr. Adrian Bylyku, Director/ Mr. Artan Leskoviku, Director of RES, National Agency for Natural Resources of Albania (AKBN)</i></p> <p><i>Ms. Tamar Sabelashvili, Chief Specialist, Energy Efficiency and Renewable Energy Policy and Sustainable Development Department, Ministry of Economy and Sustainable Development, Georgia</i></p> <p><i>Mr. Goran Nikolovski, Energy Advisor, Department of Energy, Ministry of Economy, North Macedonia</i></p> <p><i>Mr. Suren Shatvoryan, UNECE Consultant, Armenia</i></p> <p><i>Mr. Besim Islami, UNECE Consultant, Albania</i></p> <p><i>Mr. George Abulashvili, UNECE Consultant, Georgia</i></p> <p><i>Mr. Edilbek Bogombaev, UNECE Consultant, Kyrgyzstan/ Ms. Tatiana Vedeneva, President, Center for Renewable Energy and Energy Efficiency Development (CREEED), Kyrgyzstan</i></p> <p><i>Mr. Sashe Panevski, UNECE Consultant, North Macedonia</i></p> <p><i>Mr. Sergiu Robu, UNECE Consultant, Republic of Moldova</i></p>
15:30 - 15:50	<p>Open discussion and Q&A</p>
15:50 - 16:00	<p>Wrap up and way forward</p> <p><i>Mr. Oleg Dzioubinski, Regional Adviser, UNECE</i></p>
16:00 – 16:10	<p>Conference closing remarks</p> <ul style="list-style-type: none"> • Mr. Oleg Dzioubinski, Regional Adviser, Sustainable Energy Division, UNECE • Mr. Besim Nebiu, Director, Central and Eastern Europe, Habitat for Humanity International
	<p>Group Photo</p>