







WORKSHOP

ON DATA SOLUTIONS FOR EVIDENCE-BASED POLICY AND STAKEHOLDER COLLABORATION

<u>Organizers</u>: United Nations Economic Commission for Europe (UNECE), Urban Development Committee of the Republic of Armenia and United Nations Development Programme (UNDP) Armenia

<u>Target group</u>: Policy-makers, representatives of executive authorities on national, regional and city levels, statistical office representatives, city administrations, urban planners, utilities and grid operators, building management companies, architects, engineers, researchers

<u>Background:</u> Well-functioning energy and lower emission markets are the resource for sustainable growth; energy efficiency is a means to reduce costs, improve competitiveness, security of energy supply, and environmental protection. Transition to energy efficient buildings requires development of adequate legislation, efficient functioning of national and local initiatives to support implementation of individual energy projects and foster positive spill-over effects in the building stock.

Efficient access to high-quality data, development and use of common indicators can support stakeholders in taking informed decisions (including evidence-based policy) and collaborations. The examples of data relevant for energy transition of buildings include:

- Buildings construction characteristics (construction and renovation year, surface area, number of apartments);
- Occupants data (number of inhabitants, types of business by economic activity occupying the building, tenant / owner status);
- City data not related to buildings (district heating and cooling infrastructure, city development plans).

In many locations the data relevant for energy transition is already collected by different institutions (mainly, state agencies). However, there are a lot of barriers that impede the effective use of these data:

- A lot of data is still not stored in databases (currently in paper and excel sheets);
- The ways the data is stored are not standardized, the metadata is missing;
- There is no or few collaborations among the state agencies in terms of data exchange;
- The infrastructure allowing efficient and secure access to data is missing or underdeveloped;
- The legal base that determines the use of data is still to be developed.

Still, some locations have developed legal, technical and organizational solutions to overpass the existing barriers and make data available for multiple stakeholders on multiple geographic scales.

The objective of this workshop is to identify key elements needed to develop data solutions to support energy transition of buildings for Armenia, based on the case study of the respective territory and insights from international experience.

Agenda

<u>Date</u>: 12 May 2020 <u>Online platform</u>: WEBEX

| Time | Agenda item | Presented by |
|-------------|---|---|
| 10:45-11:00 | Connection of participants to WebEx, testing functions | TBD |
| 11:00-11:10 | Opening of the workshop | Oleg Dzioubinski, UNECE Regional Adviser |
| 11:10-11:40 | Introduction on data solutions for evidence-based policy and stakeholder collaboration - Data solutions definition and relevance for energy transition - Overview of initiatives for energy transition - Case study on data solutions for energy efficiency in buildings - Summary on international experience and relevance for Armenia - Questions & Answers | Alisa Freyre, Data & Digital solutions expert |
| 11:40-12:00 | Overview of national legislation and policy targets with regard to energy efficiency in buildings | Tigran Sekoyan, UNDP-GCF Climate Change Programme National Expert |
| 12:00-12:30 | Overview of national, regional and local initiatives to promote energy efficiency in buildings | Urban Development Committee of the Republic of Armenia, TBC |
| 12:30-13:00 | Current state of data collection and availability | Representatives from Government of Armenia and Municipalities |
| 13:00-13:30 | Break | |
| 13:30-14:15 | Overview of key elements of data solutions for evidence-based policy and stakeholder collaboration - Analysis framework - Stakeholder objectives and objectives of data solutions initiative - Structural elements of data solutions imitative - Deliverables of data solutions imitative - Summary - Questions & Answers | Alisa Freyre, Data & Digital solutions expert |
| 14:15-14:45 | Exercise - Analysis of key elements already present in Armenia - Identification of the gaps & existing barriers - Discussion on possible solutions & next steps | Coach: Alisa Freyre, Data & Digital solutions expert Discussion open for all participants |
| 14:45-15:00 | Closing of the workshop - Workshop outcomes - Closing remarks | Oleg Dzioubinski, UNECE Regional Adviser Representatives of Armenia Alisa Freyre, Data & Digital solutions expert |

Details on suggested content of presentations

| Agenda item | Suggested content | | |
|---|---|--|--|
| | Suggested questions / content of presentations by Armenian representatives: | | |
| national legislation and policy targets with regard to | What are the major policy-making actors with regard to energy consumption of buildings, construction and building stock management, urban and infrastructure planning? | | |
| energy efficiency in buildings | What legislation (current and under development) addresses the following questions in Armenia? | | |
| | Energy efficiency in buildings (incl. are there defined policy targets?) | | |
| | Energy statistics for buildings | | |
| | Data collection and use regarding energy consumption of buildings, construction and building stock management, urban and infrastructure planning | | |
| | What are the current and desirable data provision practices to support policy-making process regarding energy consumption of buildings, construction and building stock management, urban and infrastructure planning? Including: | | |
| | Which organizations provide data & insights to support policy-making process? | | |
| | What type of data & insights are provided? | | |
| | What are the major challenges / barriers in getting data & insights to support policy-making process? | | |
| | What type of data & insights could support the policy-making process (e.g., examples of questions policy-makers would like to receive answers to)? | | |
| | Suggested projects / initiatives to be described by Armenian representatives: | | |
| | Law on Energy Savings and Renewable Energy | | |
| | National Programme on Energy Savings and Renewable Energy | | |
| | 1st and 2nd National Energy Efficiency Action Plan (NEEAP) | | |
| | Law on State Statistics | | |
| | Action plan to implement CEPA (Comprehensive and enhanced partnership agreement with EU) | | |
| | • TBD | | |
| | Suggested questions / content of presentations by Armenian representatives: | | |
| national, regional and local initiatives to | What are the major actors in charge of building stock management, implementation of energy efficiency projects in buildings? | | |
| promote energy efficiency in | What are the initiatives (current, previous and planned) to improve energy efficiency in existing building stock in Armenia? | | |
| buildings | Projects supported by international organizations | | |
| | National initiatives | | |
| | Actions are taken by cities and municipalities | | |
| | What are the current and desirable data provision practices to support implementation of energy efficiency projects in buildings? Including: | | |

What data & insights are required for implementation of the initiatives (e.g., finding target buildings)? What is available nowadays? What are the major challenges / barriers in getting access to data & insights from other stakeholders?

What data & insights are created due to implementation of energy efficiency projects? Is it shared with other stakeholders (if yes, how)? What are the major challenges / barriers in sharing the data & insights with other stakeholders?

Suggested projects / initiatives to be described by Armenian representatives:

- UNDP project de-risking investments in energy efficiency in buildings
- MRV System project in Armenia
- Municipal Energy Management System (MENMS) project
- Energy Management Information System (EMIS) project
- Case-studies of implementation of energy efficiency projects in cities / municipalities (Stepanavan city in Lori region; Yerevan Municipality; ...)
- TBD

Current state of data collection and availability

Suggested questions / content of presentations by Armenian representatives:

- What are the major actors that collect data on building stock, energy consumption of buildings, urban planning and infrastructures?
- What data is currently available on individual building level? How is it collected? What is geographically referenced?
 - Building characteristics (e.g., addresses, surface, number of floors, usage / occupancy)
 - Energy consumption (e.g., electricity, natural gas for heating)
 - Occupants (e.g., number of apartments, size of households, types of companies and number of employees)
 - Urban development and infrastructure plans (e.g., new construction)
- What are the current and desirable data provision practices?

Suggested projects / initiatives to be described by Armenian representatives:

- Building data collection and availability by cadastre (http://www.cadastre.am/)
- Data collection practices by retail energy suppliers (Electric Networks of Armenia CJSC; Gazprom Armenia CJSC, ...)
- TBD