

UNDA project, on “Up-scaling Energy Efficiency in the residential and services sectors in the Arab Region”



Shared Prosperity **Dignified Life**



Economic and Social Commission for Western Asia

Draft results of the baseline mapping study of the energy use situation in the buildings sector in Jordan

Introduction of the mapping study context and methodology

Taskforce Meeting, 27 November 2019 –Amman, Jordan

Table of Contents

- Introduction to the ESCWA UNDA project on “Up-scaling EE in the residential and services sectors in the Arab Region”
- Introduction of the baseline mapping study of the energy use situation in the buildings sector in Jordan
- Introduction of the agenda of the meeting

Introduction of the ESCWA UNDA project on “Up-scaling EE in the residential and services sectors in the Arab Region”

Objectives:

- substantially enhance the capacity of Arab countries in improving and optimizing energy efficiency in the building sector
- Induce a change of scale in the implementation of energy efficiency programs in the existing residential and non-residential building stock.

Introduction of the ESCWA UNDA project on “Up-scaling EE in the residential and services sectors in the Arab Region”

Axes of intervention:

- Develop a comprehensive baseline mapping study to provide the reference situation/ baseline parameters, for developing EE programs
- Develop short, medium & long-term strategies/ appropriate EE policies for the residential and services sectors, to be used as frameworks for the implementation of large scale EE programs.
- Initiate & enact, or reinforce existing, household and other equipment energy labelling systems and Minimum Energy Performance Standards (MEPS).
- Produce guidelines and trainings material in support of improving energy performance in the building sector
- Set up effective large-scale implementation schemes for dissemination of higher EE equipment & appliances, as well as improving the thermal performance of existing buildings, involving private and public resources,

Introduction of the baseline mapping study of the energy use situation in the buildings sector in Jordan

Achieve a better understanding of where and how energy is consumed in the buildings sector:

- ✓ Identify EE opportunities and capacity building needs
- ✓ Develop indicators for monitoring consumption and energy performance
- ✓ Predict how the energy consumption of the sector would be evolving in the case of a Baseline scenario
- ✓ Establish scenarios of the evolution of the energy consumption of the sector in case of implementation of EE programs

Introduction of the baseline mapping study of the energy use situation in the buildings sector in Jordan

Main elements of the baseline study:

- ✓ Identification of key stakeholders in the residential and services sectors
- ✓ **Current state of energy consumption in the residential and services sectors and preliminary assessment of their share of the overall national energy consumption**
- ✓ **Socio-economic/ energy characterization of the existing building stock, by branch of activities: Estimation of the existing building stock in each branch and the projected evolution of this park until 2030**
- ✓ Assessment of existing EE policies and programs (building energy performance codes, energy labeling standards, MEPS, etc.), knowhow and capacities in the country, as well as potential local financing tools.

Introduction of the baseline mapping study of the energy use situation in the buildings sector in Jordan

Main elements of the baseline study:

- ✓ Identification of possible institutional options to insure the implementation of the project within each member country, including the development of Super ESCO structures
- ✓ Assessment of the energy pricing tariffs that are in place, and their eventual deviation from “real” energy prices (existing of subsidies, special pricing schedules, etc.) and their impacts on the implementation of EE measures
- ✓ Comparative review of existing energy policies and strategies best practices in selected countries in order to identify key policy gaps and/or barriers.
- ✓ Assessment of energy efficiency potential in the residential and services sectors by branch of activities and type of buildings

Introduction of the baseline mapping study of the energy use situation in the buildings sector in Jordan

Approach for conducting the baseline mapping study:

- ✓ Engaging a team of 1 national consultant & 1 international consultant
- ✓ National launching workshop, 5 Mars 2019 –Amman – Jordan
- ✓ Identification of the main actors in the residential and tertiary sectors
- ✓ Collection of official documents and studies
- ✓ Data analysis and energy characterization of the residential and tertiary sectors:
 - Estimation of the built stock in number and surface area
 - Estimation of final & primary energy consumption
 - Estimation of the equipment rate
 - Zoom on some specific end-uses
 - Estimation of specific indicators
 - Evolution of the park and equipment rate
 - Etc.

Introduction of the baseline mapping study of the energy use situation in the buildings sector in Jordan

Table of content for the baseline mapping report:

- I. Introduction
- II. Characteristics of the building sector in Jordan with respect to its energy issues
- III. Overview of the existing building stock and summary of its characterization
- IV. Typologies of existing buildings in the tertiary and residential sectors and the potential evolutions of their parks
- V. Detailed inventory of the existing building stock and its energy characteristics

Introduction of the agenda of the meeting

4 parts:

- ✓ **Session 1** : Introduction and project overview
- ✓ **Session 2** : Buildings energy issues, policy and institutional frameworks in Jordan
- ✓ **Session 3** : Draft findings about the characteristics and profiles of energy consumption of the residential sector in Jordan
- ✓ **Session 4** : Draft findings about the characteristics and profiles of energy consumption of the services sector in Jordan

Closing remarks

Economic And Social Commission For Western Asia



UNITED NATIONS

الاسفوا

ESCWA

THANK YOU FOR YOUR ATTENTION