

## Environmental and Social Data Sheet

### Overview

Project Name:	YEREVAN ENERGY EFFICIENCY
Project Number:	2015-0124
Country:	Armenia
Project Description:	The operation is a framework loan (FL) in support of sustainable energy efficiency improvements targeting public buildings in Yerevan, Armenia. Part of the allocations under the FL has already been identified ex ante through advisory support and consists of the refurbishment of 16 public buildings. The remainder of the pipeline of allocations will be further developed by the promoter, the Municipality of Yerevan, with advisory support.
EIA required:	no
Project included in Carbon Footprint Exercise:	no

### Environmental and Social Assessment

#### Environmental Assessment

The project is mainly related to improving the thermal insulation of municipal buildings as well as other building-related energy efficiency measures including boiler replacement, solar hot water and rooftop solar power generation, relighting, etc. in Yerevan. As a result of the project, the energy consumption for heating purposes will be reduced by around 50%, which will consequently reduce the atmospheric pollution and the gas consumption.

Temporary nuisance due to civil / construction works (mainly dust, noise and to a lesser extent traffic disruption) is mitigated through appropriate site organisation and construction management. The thermal insulation in buildings with facades that have been designated as cultural heritage shall be from the inside thus protecting and preserving the facades. Due to the nature of the investment no significant negative environmental impacts are expected.

The total energy saved through the FL will amount to approximately 13.9 GWh/year for heating and 4.5 GWh/year for electricity. The renewable energy generation will amount to approximately 6 GWh/year, once the project is fully implemented. The primary energy savings (excluding renewable electricity generation) are estimated at 24 GWh/year.

#### Social Assessment

No special social risks are anticipated for this project. On the contrary, the project is expected to bring about considerable positive social benefits related to the gains in energy efficiency and associated decrease in energy costs. Moreover, the project envisages measures that will improve the accessibility to public buildings for persons with disabilities

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The Labour Code (14 December 2004) of the Republic of Armenia is the main legislation on occupational safety and health which includes chapter 23 dedicated to occupational safety and health and working conditions. The labour code was revised in 2008 in cooperation with USAID to align with the relevant ILO conventions. Visits to building sites in Armenia showed the proper implementation of satisfactory health and safety standards.

## Conclusions and Recommendations

The operation will support the reduction of energy consumption in public buildings. Thus, it will reduce atmospheric pollution related to the production of heat (SO<sub>2</sub>, NO<sub>x</sub> and particulates) and will help mitigate climate change by avoiding associated CO<sub>2</sub> emissions. Given the scale, location and nature of the sub-projects in built-up urban areas, there are no significant environmental or social risks expected.

The promoter will ensure that after the thermal refurbishment, energy performance certificates will be issued by independent accredited experts in accordance with the national legislation and the methodology to be prepared by the Technical Assistance supporting this operation.

The loan will be conditional to ex-post verification by independent experts on the achieved savings.

The promoter will have to ensure that EIB Environmental and Social Guidelines will be followed for and during the implementation of the subprojects, especially in regard to safety and EIA obligations.

Based on the above it is concluded that this operation is acceptable to the Bank from an environmental and social point of view.