



Integrated Safeguards Data Sheet Identification / Concept Stage (ISDS)

Concept Stage | Date ISDS Prepared/Updated: 09-Aug-2018 | Report No: ISDSC24087



BASIC INFORMATION

A. Basic Project Data

Project ID	Project Name	Environmental Category	Country
P166751	Energy Efficiency Improvements in Public Buildings in the Kyrgyz Republic	B - Partial Assessment (B)	Kyrgyz Republic
Team Leader(s)	Estimated Date of Approval	Managing Unit	Financing Instrument
Katharina B. Gassner, Kathrin Hofer		GEE03	Investment Project Financing

Public Disclosure Copy

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	2.66
Total Financing	2.66
Financing Gap	0.00

DETAILS

Non-World Bank Group Financing

Trust Funds	2.66
Energy Sector Management Assistance Program	2.66

B. Project Development Objective(s)

The proposed activity aims to pilot innovative energy efficiency and renewable energy technologies in selected public buildings in the Kyrgyz Republic.

C. Project Description

The proposed project will be financed through a US\$2.66 million recipient-executed grant provided by the Government of Switzerland and channeled through ESMAP, a multi-donor Trust Fund (TF). The RETF is directly linked to the HSIP by providing co-financing towards Component 3, which aims to demonstrate the benefits of EE improvements in public buildings. Due to a timing lag between the HSIP and the proposed RETF, the latter was not submitted as joint co-financing (but its scope was described as part of the HSIP).



The proposed RETF involves three Components: (1) piloting of innovative EE and renewable energy (RE) technologies in selected public buildings; (2) capacity building and technical assistance support; and (3) grant implementation support.

COMPONENT 1: Piloting of innovative EE and RE technologies (estimated US\$1,522,000 RETF financing).

This component will provide investment grants to pilot innovative EE and RE technologies in a number of buildings that will be retrofitted as part of Component 3 of the HSIP.

Eligible technologies. Innovative technologies piloted under Component 1 are aimed at complementing standard EE and seismic measures supported under the HSIP, demonstrate viable alternatives to traditional electric heating in public buildings and enhance the combined electricity savings impact. Eligibility criteria for innovative technologies are proposed to include the following: (i) internationally proven and well-tested technologies for buildings; (ii) additional energy savings impact compared to the standard technical EE solution supported under the HSIP and/or enhanced reliability of energy supply; (iii) replication potential as assessed through the RE potential; and (iv) sufficient market capacity to supply, install and operate the technologies. On the basis of these criteria and the draft findings of a market assessment on innovative EE/RE technologies, including walk-through energy audits in 10 public buildings, eligible technologies are expected to include (non-exhaustive list): solar photovoltaic (PV) rooftop (with or without power storage battery); sanitary hot water air source heat pump; large air-to-water heat pump for space heating (through ventilation system or central heating network); and LED lighting with controls (movement, daylight, time). Stand-alone RE units (e.g. small hydro, wind, PV) are not eligible under the RETF.

Selection of buildings for innovation grants. The innovative technologies would be piloted in a subset of public buildings selected under the HSIP and implemented alongside comprehensive EE and seismic measures supported under the HSIP. The innovation grants will be provided in three annual rounds (in line with the buildings selection and implementation process under HSIP). Prioritization criteria for the selection of buildings where innovation grants will be provided will be based on the results of the detailed energy audits and be made based on the following criteria: (i) technical feasibility, applicability and viability for the building context; (ii) impact on electricity savings; (iii) mitigating impact on power cuts (buildings experiencing frequent power cuts would be prioritized); and (iv) increase in deployment of innovative technologies under the HSIP.

Implementation readiness. The first set of buildings to be retrofitted under the HSIP (involving four schools, two kindergartens and two health sector buildings) has been selected and preliminary walk-through energy and seismic audits were conducted for all buildings to confirm eligibility of the buildings as per HSIP criteria and identify potential innovative EE and RE measures. In six out of eight buildings, innovative EE/RE measures have been identified that meet above mentioned criteria for the innovation grants, including: heat pumps for space heating and/or sanitary hot water; lighting control systems; and PV emergency back-up units with power storage battery. Investment costs for these measures are estimated at US\$580,000, equaling around 28 percent of the total investment costs. Detailed energy audits and seismic assessments



will be conducted in June-September 2018 to validate these findings and inform detailed designs for the buildings.

COMPONENT 2: Capacity building and technical assistance support (estimated US\$974,000 RETF financing).

This component will support capacity building, awareness raising and technical assistance support for the preparation and implementation of EE and RE investments. Specifically, this would include:

- *Capacity building for the identification, preparation and implementation of innovative EE and RE technologies*, including training and targeted technical assistance aimed at increasing the capacity and knowledge of local key stakeholders on innovative EE and RE technologies. The target audience will include local service providers (e.g. energy audit companies, design firms, local suppliers) as well as public stakeholders (e.g. ARIS, State Committee for Industry, Energy and Mining; State Agency for Architecture, Construction and Housing; State Inspectorate on Ecological and Technical Safety; etc.).
- *Awareness raising activities*, mainly aimed at capturing and dissemination achieved results of the innovative technologies for demonstration, awareness and project promotion purposes.
- *Technical support for preparation and implementation of EE and RE measures* for one annual batch of buildings retrofitted under the HSIP and the proposed RETF; specifically, this will include energy audits and seismic assessments for at least seven buildings selected under the HSIP, detailed designs and technical specifications as well as technical supervision of implemented EE and RE measures.

COMPONENT 3: Grant Implementation Support (estimated US\$ 165,000 RETF financing). This component will provide Grant implementation support to ARIS, including: (i) PIU staff/ consultants (full-time technical expert throughout the project and a temporary procurement specialist until effectiveness of the HSIP); (ii) Grant-related operating costs; and (iii) annual audits of the Project accounts.

Public Disclosure Copy

SAFEGUARDS

D. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The specific locations of the RETF activities to be carried out under Component 1 will overlap with the buildings selected for the HSIP (i.e., no separate selection for the RETF). It is anticipated however that only a smaller subset of HSIP buildings will be appropriate for innovative measures under the RETF.

E. Borrower's Institutional Capacity for Safeguard Policies

Over the last years ARIS has been acting as PIU in different World Bank projects and could build up significant institutional capacity for the Bank's Safeguard Policies. In addition, a part-time safeguards specialist will be hired under the HSIP to ensure compliance with the ESMF and development of site-specific ESMPs. There is



no land take needed under the Energy Efficiency Component of the HSIP and the RETF will only support a subset of the selected buildings under the HSIP.

F. Environmental and Social Safeguards Specialists on the Team

Kristine Schwebach, Social Safeguards Specialist

Qing Wang, Environmental Safeguards Specialist

G. Policies that might apply

Public Disclosure Copy

Safeguard Policies Triggered by the Project	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>This RETF has direct linkage with the HSIP Component 3. Innovative technologies piloted under Component 1 of the RETF are aimed at complementing standard EE and seismic measures supported under the HSIP Component 3, to demonstrate viable alternatives to traditional electric heating in public buildings and enhance the combined electricity savings impact. OP 4.01 on Environmental Assessment (EA) is triggered as the proposed activities under Component 1 might generate similar environmental impacts as the HSIP Component 3 does, such as dust, noise, soil removal and destruction, occupational hazards, traffic disruptions, construction wastes, etc.</p> <p>An ESMF has been prepared and disclosed for the HSIP and it requires that for each subproject under HSIP Components 3, site-specific ESMPs - based on requirements of the ESMF - will be developed and presented to the Bank for no objection. The ESMPs will specify necessary prevention, mitigation and monitoring activities to be followed during project implementation along with the implementing arrangements, including with regard to hazardous substances, such as asbestos. The ESMF and the site-specific ESMPs will be applied to this RETF as well. Once the</p>



Public Disclosure Copy

		public buildings are selected following the established selection criteria under the HSIP, energy audits and seismic assessments will be conducted in each selected building to identify the economically most viable energy efficiency measures (including eligible measures and technologies required by both the HSIP and this RETF) and seismic reinforcements needed to comply with local regulations.
Natural Habitats OP/BP 4.04	No	The project will not finance any activities within natural habitats, wildlife reserves, protected areas or critical natural habitats and its buffer zones, therefore will not have any adverse impact on environmentally and socially sensitive areas. Constructions are expected to be within city boundaries.
Forests OP/BP 4.36	No	No project activities (i.e. constructions) will be located in forests, in particular any protection or conservation forest areas nor critical habitats and buffer zones.
Pest Management OP 4.09	No	This project will not procure or use any pesticides.
Physical Cultural Resources OP/BP 4.11	No	There are no registered physical cultural resources or resources of local or national interest in the vicinity of the project areas. However, should any PCR be identified by chance at any stage of the project implementation, its handling will be safeguarded by a PCR management procedure presented in the ESMF.
Indigenous Peoples OP/BP 4.10	No	OP 4.10 is not triggered as project activities do not impact indigenous peoples.
Involuntary Resettlement OP/BP 4.12	No	This project will work within the existing footprint of government owned buildings. There will be no need for additional access for works as the buildings will already have access. All social concerns of health and safety not only of contractors but also building staff, will be addressed in the ESMPs.
Safety of Dams OP/BP 4.37	No	The project will not finance dams, nor the rehabilitation or any activities related to dam operation and safety. It will not



		depend on the operation of an existing dam either.
Projects on International Waterways OP/BP 7.50	No	The project is not on international waterways.
Projects in Disputed Areas OP/BP 7.60	No	The project will not finance any activities within territorially disputed areas.

H. Safeguard Preparation Plan

Appraisal stage ISDS required? No

APPROVALS

Team Leader(s):	Katharina B. Gassner
-----------------	----------------------

Approved By

Safeguards Advisor:	Brandon Enrique Carter	17-Jul-2018
Practice Manager/Manager:	Sameer Shukla	18-Jul-2018

Public Disclosure Copy

¹ Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) by the Bank and (ii) in country by the Borrower/Recipient, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.