



Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 03-Dec-2019 | Report No: PIDISDSA27915

**BASIC INFORMATION****A. Basic Project Data**

| | | | |
|--|--|---|---|
| Country Kyrgyz Republic | Project ID P171934 | Project Name Additional Financing to Heat Supply Improvement Project | Parent Project ID (if any) P157079 |
| Parent Project Name Heat Supply Improvement Project | Region EUROPE AND CENTRAL ASIA | Estimated Appraisal Date 03-Oct-2019 | Estimated Board Date 12-Dec-2019 |
| Practice Area (Lead) Energy & Extractives | Financing Instrument Investment Project Financing | Borrower(s) Kyrgyz Republic | Implementing Agency Bishkekteploset JSC (BTS), Community Development and Investment Agency (ARIS) |

Proposed Development Objective(s) Parent

The Project Development Objective is to improve the efficiency and quality of heating in selected Project areas.

Components

- Component 1: Improving supply efficiency and quality of the District Heating system in Bishkek
- Component 2: Piloting efficient and clean heating stoves
- Component 3: Demonstrating the benefits of energy efficiency improvements in public buildings

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

| | |
|---------------------------|------|
| Total Project Cost | 2.66 |
| Total Financing | 2.66 |
| of which IBRD/IDA | 0.00 |
| Financing Gap | 0.00 |

DETAILS**Non-World Bank Group Financing**

| | |
|-------------|------|
| Trust Funds | 2.66 |
|-------------|------|



Energy Sector Management Assistance Program

2.66

Environmental Assessment Category

B-Partial Assessment

Decision

The review did authorize the team to appraise and negotiate

Other Decision (as needed)

B. Introduction and Context

Country Context

1. **The Kyrgyz Republic remains one of the poorest countries in the Europe and Central Asia (ECA) region, and the energy sector is critical for its economic growth.** The country has maintained economic growth, albeit with significant volatility, since its 1991 independence: real GDP growth averaged 4.5 percent per year over 2000-18. The economy remains vulnerable to external shocks owing to its reliance on one gold mine, Kumtor, which accounts for about 10 percent of GDP, and on worker remittances, equivalent to about 27 percent of GDP in 2018. Significant efforts by the Government since independence have contributed to an overall downward trend in poverty, but according to World Bank estimates, the poverty rate (measured by national standards) remains high and above that of most countries in the region: the poverty rate (measured at \$3.20 per day, in 2011 PPP terms) was estimated at 19.3 percent in 2018. Poverty is concentrated in rural areas, where utility services are also of inferior quality, with 7 out of 10 poor persons living there. Ensuring a secure, adequate, and affordable energy supply is a high priority for the Government, as reflected in its National Strategy of Development of the Kyrgyz Republic for 2018-2040¹, the Strategy for the Development of the Fuel and Energy complex until 2025, and the Action Plan of the Government of the Kyrgyz Republic for 2019 on the implementation of the Plan of the Government for 2019-2023.²

2. **While the Kyrgyz Republic is endowed with significant natural energy resources, particularly in hydropower, it faces the risk of winter supply gaps.** The country's hydropower resources generate most electricity used (above 80%) with coal fired thermal plants providing the balance in winter months (predominantly a CHP plant in Bishkek). Many people rely on electricity for their winter time heating needs, yet adequately meeting heating demand remains a challenge for a large part of the population. An estimated 25% of residential and public heat demand in urban areas alone remains unmet every winter due to several challenges. This includes constrained winter supply, more particularly so during low hydrology cycles: during the heating season 2014-15 for example, supply was rationed in the regions and similar regulations for the capping electricity usage are expected for the heating season 2019-20.

3. **Improving the efficiency of the heating supply and following through on the objectives in the country's national Energy Efficiency (EE) policy are key tools to alleviate this situation.** The country's cold climate and long heating season mean access to reliable and adequate heat supply is an essential need. Access to district heating (DH), a relatively efficient form of heating, is limited to about 17% of the 1.1 million Kyrgyz households, mainly located in Bishkek and other urban centers. The remaining 907,000 households resort to individual solutions to meet their heating

1 Approved by Decree of the President of the Kyrgyz Republic dated October 31, 2018 No. 221.

2 Approved by Resolution of the Government of the Kyrgyz Republic, Bishkek, dated March 29, 2019 No. 141



needs during winter, including individual coal-based systems (used by around 60% of all households as primary heating source), followed by electricity (15%), wood and dung (6%), and gas (1%).³ However, often these solutions are not enough and heating demand goes unmet. Similarly, for public buildings, one of the largest energy end-consumers at 10% of the country's primary energy (10% of national power consumption and 11% of overall coal consumption) there is underheating during winter with comfort conditions far below norm requirements.⁴

Sectoral and Institutional Context

4. **High heat losses of buildings exacerbate inefficient and inadequate heat supply.** The Kyrgyz Republic ranks among the 15 most energy intensive developing countries worldwide. Its energy intensity (measured as energy use per US\$1,000 GDP) has increased in 2010-2014 from 181 kgoe/\$1,000 GDP to 204 kgoe/\$1,000 GDP, and was about 23 percent higher than the ECA average in 2014.⁵

5. **The Kyrgyz buildings stock is a major contributing factor to the high energy intensity.** Particularly in terms of electricity consumption, buildings are the main electricity consumers in the country, accounting for more than 70 percent of electricity supplied to end-consumers in 2016.⁶ Specific energy demand in the Kyrgyz Republic (estimated average of 250 kWh per square meter) is high compared to other ECA countries, even when adjusted for heating degree days. Reasons for the high energy intensity in the Kyrgyz buildings sector include the large share of dated buildings with poor insulation, old heating and lighting systems, and years of under-maintenance. In addition, the widespread use of electricity for heating purposes explains the high share of buildings in terms of electricity consumption.

6. **The public buildings sector accounts for about 10% of total electricity consumption** with an upward pressure that is partially controlled by the enforcement of power consumption limits for public buildings. The public buildings stock is estimated to be composed of 9,780 buildings with educational and health sector buildings accounting for more than half of the number of buildings. Most buildings were constructed 35-75 years ago during the Soviet period without any energy efficiency considerations. A recent World Bank assessment⁷ revealed that 90% of the complete building stock needs some kind of rehabilitation. Accentuated by insufficient resources for maintenance, public buildings are characterized by high heat losses due to the dilapidated condition of the building envelope and the heating system, and are poorly maintained. In addition, an urban heating assessment completed in 2015⁸ confirmed that, on average, around 20-30% of the heat demand in public buildings in urban areas remains unmet every year due to the high heat loss of buildings combined with insufficient and unreliable heat and electricity supply.

7. **The energy savings potential and related co-benefits in the public buildings sector are significant.** Based on available energy audits for public buildings, it is estimated that EE improvements would help to reduce energy consumption by 55-70 percent or roughly 500 GWh/year⁹, while bringing comfort level in buildings up to the norm requirements. Heat pump technology will play an important role in exploiting those electricity efficiency potentials and can make an important contribution in curbing the country's winter power shortages. An important co-benefit of EE improvements is the increase in comfort levels in buildings – in winter, indoor temperatures in schools, kindergartens

3 These shares refer to the primary heating source; the majority of households use more than one fuel for space heating: 52% of the households living in Bishkek, 42% in other urban areas, and 65% in rural areas use a secondary fuel to keep their homes warm.

4 Roadmap for the Implementation of Energy Efficiency in Public Buildings of the Kyrgyz Republic, April 2019. Copyright © 2019 The International Bank for Reconstruction and Development/THE WORLD BANK GROUP

5 World Development Indicators

6 World Bank, 2015, Keeping Warm: Urban Heating Options in the Kyrgyz Republic.

7 World Bank 2019, Roadmap for the implementation of energy efficiency in public buildings of the Kyrgyz Republic.

8 World Bank, 2015, Keeping Warm: Urban Heating Options in the Kyrgyz Republic.

9 Equivalent to 80% of the annual output of Uch-Kurgan HPP, Kyrgyzstan's fifth largest hydroelectric power plant.



and hospital are as low as 13°C. Given the dry climatic conditions with 2,600 hours of sunshine per year and annual Global Horizontal Irradiation (GHI) of approximately 1,500 kWh per square meter, domestic solar energy resources provide good potential to further increase the energy performance of buildings in combination with EE measures.

8. **Summary of Parent Project: The Heat Supply Improvement Project (HSIP, P157079) was initiated to help improve the efficiency and quality of heating in selected Project areas.** The project was approved October 27, 2017, with an International Development Association (IDA) grant of SDR 16.3 million (US\$23 million equivalent) as well as an International IDA credit of SDR 16.3 million (US\$23 million equivalent). It became effective on April 25, 2019. The Project Development Objective (PDO) is to improve the efficiency and quality of heating in selected Project areas. The project supports the Government's objectives in the heating sector and helps to address recurrent winter energy shortages. Specifically, improving the efficiency and quality of heating supports the Government's sector strategy in the following ways: (i) helping to mitigate a further increase in electricity consumption for heating by improving DH services in Bishkek and by reducing the electricity consumption in selected public buildings through EE improvements; (ii) complementing the recent modernization of the combined heat and power (CHP) plant by network improvements of the DH system to ensure that the expected benefits of the investment reach end-users; (iii) ensuring that future heat and hot water tariff increases are accompanied by improvements in heat supply quality and reliability as well as by introducing the concept of consumption-based billing; and (iv) reducing fuel consumption, expenditures and health costs associated with the use of inefficient and polluting heating technologies for vulnerable households.

9. **The HSIP project has 3 components** which are: Component 1 - Improving supply efficiency and quality of the DH system in Bishkek; Component 2 - Piloting efficient and clean heating stoves; and Component 3 - Demonstrating the benefits of energy efficiency improvements in public buildings.

10. **After two years of implementation, the project's overall progress towards its PDO is rated Moderately Satisfactory.** While there was a delay in effectiveness (effectiveness was achieved 18 months after Board approval on April 25, 2019), the project has achieved early progress:

a. **Component 1: Improving supply efficiency and quality of the DH system in Bishkek** (estimated USD 31 million). With support of an ECAPDEV project preparation grant, tender documentation for the two largest investment packages was prepared. Bidding documents for new substations and meters (estimated cost of USD 17 million) are complete and tenders are expected to be launched in November 2019. Technical documentation for the Vostok pipeline replacement (estimated cost of USD 12 million) is well-advanced and undergoing Bank review; the tender is expected to be launched by end 2019. A draft ESMP and resettlement screening report for the Vostok pipeline replacement has also been prepared and is undergoing final revision.

b. **Component 2: Piloting efficient and clean heating stoves** (estimated USD 5 million): During the parliamentary ratification process for the Heat Supply Improvement project, support for Component 2 was withdrawn, reflecting an adjustment in Government's priorities for IDA financing support. An official letter requesting the cancellation of the Component was sent to the World Bank in July 2019 after project effectiveness. While the component will be canceled and restructuring of the HSIP is occurring, some progress towards the component's objective was achieved. Through an ESMAP grant, capacity building and technical assistance support was provided to spur development of clean and efficient stoves in the Kyrgyz Republic and 70 improved stoves were put in households in two trials during the heating seasons 2016-17 and 2017-18. A local NGO active in stove production and distribution has taken on the new stove designs and in collaboration with several producers is supplying a small number of stoves to the local market. Finally,



outreach to other donors with active community development projects (e.g. Aga Khan Development Network) was conducted to enable other donor project to integrate clean and efficient stove programs into their work.

c. **Component 3: Demonstrating the benefits of energy efficiency improvements in public buildings** (estimated USD 10 million): The first set of public buildings to receive retrofits was selected in 2018 through the agreed nomination and ranking process and full energy and seismic audit reports for these educational and health facilities in Bishkek city and Chuy and Talas regions finalized in early 2019. Six buildings have been confirmed for retrofits for the first round and detailed designs and drawing are at present being commissioned by the implementing agency Community Development and Investment Agency (ARIS). The inspection of shortlisted nominated buildings for the second round (regions Naryn, Jalal-Abad and Issyk-Kul) took place in September 2019; detailed EE and seismic assessments will be conducted during the heating season 2019-20.

11. **Co-Financing Grant towards implementation of Component 3 of HSIP:** The Government of Switzerland, as represented by the State Secretariat for Economic Affairs (SECO), has approved a grant in the amount of US\$4 million in 2017, consisting of a Bank-Executed and a Recipient -Executed part, towards the implementation of Component 3 (Demonstrating the benefits of energy efficiency improvements in public buildings) of the HSIP. The recipient executed grant in the amount of US\$2.661 million (excluding Bank administration fees) is integrated into the HSIP as additional finance (AF) to provide (i) additional grant financing enabling more advanced and innovative energy efficiency technologies in selected buildings under the HSIP; (ii) capacity building and awareness raising activities on energy efficiency; (iii) preparation of technical documentation for a set of selected buildings under the HSIP; and (iv) grant implementation support to the Community Development and Investment Agency (ARIS) as the implementing entity of the SECO grant.

12. **The Government has begun to recognize the importance of EE improvements and has initiated a number of important steps to help improve the EE framework but implementation lags.** As a cross-cutting issue, energy efficiency is affected by various governmental programs and reflected in numerous plans, concepts and strategies. In particular, in 2015 the Ministry of Energy and Industry developed and adopted the *Program of the Government of the Kyrgyz Republic on Energy Savings and Energy Efficiency Policy Planning for 2015-2017*¹⁰ within the framework of the Sustainable Energy Program for Central Asia (CASEP)¹¹ and with advisory support from the European Union. The program defined the main priorities for the development of EE and set general targets for the entire economy of the country. These include (i) Energy savings of 2.23 million tonnes of oil equivalent (toe) by 2017; (ii) a reduction of energy losses of 4.1 million toe by 2020 by promoting the use of energy-efficient technologies and materials in the production, transmission and consumption of power and gas; (iii) a reduction of energy intensity by 30% and annual energy consumption by 5% (generating energy savings of up to 8 million tonnes of fuel equivalent), through a “restructuring” of the economy over the period 2015-2025; and (iv) a reduction of greenhouse gas emissions (in CO₂ equivalents) of up to 20% by 2020, in accordance with the Kyrgyz Republic’s obligations to the UN Framework Convention on Climate Change (UNFCCC).¹² The Program highlights the importance of a mechanism for reinvesting the energy savings retained by public organizations as a result of implementing energy savings measures. However, the document contains no further energy efficiency targets by sectors (industry, buildings, transport) and does not specify the instruments or provisions required to implement the program and meet the specified targets.

¹⁰ <http://cbd.minjust.gov.kg/act/view/ru-ru/97870>.

¹¹ For more on CASEP, see http://www.inogate.org/projects/75?lang=en&order=date_end_desc§ion=activities.

¹² This voluntary commitment was announced by the Minister of Foreign Affairs, Mr. E. Abdylidaev, on September 23, 2014, at the New York Climate Summit. (See Chapter 5.)



13. **Multiple barriers continue to hamper EE improvements.** While the potential for EE improvements in public buildings is significant, a number of technical, economic, institutional, legal, regulatory and financial impediments are preventing comprehensive EE investments from being undertaken: (i) low energy tariffs and norm-based billing for district heating; (ii) strained public sector budgets and lack of access to commercial financing by public entities, including for energy efficient retrofits; (iii) public budgeting regulations that limit achievable and retainable energy cost savings; (iv) lack of local market capacity and experience (e.g. energy auditors, design institutes, construction companies, etc.) in preparing and implementing high quality EE projects; (v) lack of credible data, awareness and behavioral inertia, which hamper the demand for and investments in EE products and services; and (vi) institutional and regulatory barriers, such as incomplete legislation and weak enforcement of building codes.

14. **In order to support the Government in the realization of its EE goals and build implementation capacity in the country, development partners are demonstrating the feasibility and economic viability of EE investments.** Among notable donor projects are the EBRD funded *Kyrgyz Sustainable Energy Financing Facility* (KyrSEFF) which collaborates with intermediary financial institutions implementing on-lending to private sector borrowers (including SMEs and households) for sustainable energy investments. In the public building context, the World Bank has taken the lead with currently three projects involving the retrofit of public buildings, combining in all case energy efficiency and seismic stability measures: the *Urban Development project (UDP, P151416)* which pilots six school retrofits in two municipalities; the *Heat Supply Improvement Project (HSIP, P157079)*, parent project to the current AF), which aims to retrofit 18-20 educational and health facilities across all regions of the country, and the *Enhancing Resilience in Kyrgyz Republic (ERiK, P162635)* project, which seeks to systematize the retrofit of schools across the country. The proposed AF is embedded in past and ongoing technical assistance activities financed by the Energy Sector Management Program (ESMAP), the Global Facility for Disaster Reduction and Recovery (GFDRR) and the Bank-executed part of the hybrid Trust Fund supported by SECO. Specifically, complementary activities supported through the Bank-executed technical assistance program on EE involve: (i) assessment of the public buildings stock in terms of EE potential and seismic typologies; (ii) market assessments for EE and RE technologies with particular focus on innovative EE and RE technologies for public buildings; (iii) energy audits and seismic baseline studies in selected buildings; (iv) development of a Roadmap on scaling-up EE in the medium-to long-term; (v) targeted technical assistance and training to local companies and stakeholders on EE; (vi) EE diagnostics and investment plans in 3-4 select cities/municipalities; and (vii) development of operational documents to facilitate implementation of EE investment.

15. **The proposed AF has the objective to demonstrate the applicability and operability of advanced energy saving measures across all regions in the country.** The introduction of more innovative and advanced technologies such as heat pumps or advanced ventilation systems will take into account factors such as geographic accessibility and closeness to markets, climatic conditions, and long-term operations, maintenance and repair needs. As shown in a recent market assessment,¹³ starting from a very small base, the EE/RE market in Kyrgyzstan has grown approximately by 30% within the last 3 years and similar estimation applies to the market of construction materials and technologies. There are now estimated to be more than 50 companies working with RE technologies and heat pumps in the country, with increasing average experience, and the awareness on RE and EE technologies has grown. With the AF, the choice of advanced solutions will be supported with the aim to accelerate the spread and acceptability of high efficiency solutions which are still uncommon in public buildings. On average it is expected that energy savings can be boosted by up to 25% in select buildings retrofitted under the HSIP via the application of advanced measures.

16. **Two of the three project components are affected by AF and restructuring:** The proposed AF will help scale up Component 3, resulting in increased energy and GHG emission savings, while at the same time building capacity within

¹³ World Bank 2019, Roadmap for the implementation of energy efficiency in public buildings of the Kyrgyz Republic.



the design and construction market such that market players understand and can eventually offer advanced retrofit measures themselves. In addition, the proposed AF includes restructuring to account for the cancellation of Component 2 to revise the (i) Results Framework; and (ii) Components and Costs. The restructuring of the project components and costs reflects the cancellation of US\$ 5 million allocated to Component 2 (Piloting clean and efficient stoves).

17. **There is a two-fold rationale for proceeding with an AF operation.** First, doing so will enable the application of advanced, innovative technologies that will scale up the positive effect of the EE retrofit of selected public buildings. This will also demonstrate the most effective available EE technologies in a national context and enhance the capacity building measures targeting the design and construction market. Second, market players will be exposed to and understand how to deploy advanced retrofit measures, which lead to larger impacts, market development and demonstration for newer products and technologies.

18. **The proposed AF complies with the Bank Policy Directive on Investment Project Financing,** to the extent that (i) both Implementation Progress and Project Development Objective ratings have been rated Moderately Satisfactory or better; and (ii) all key loan covenants including audits and financial reporting requirements have been complied with. There are no overdue audit reports. Further, substantial compliance with loan covenants is confirmed.

19. **The AF's objective is furthermore aligned with the World Bank Group's Country Partnership Framework 2019-22.** The current CPF highlights public service delivery as well as maintenance of scarce natural resources and physical infrastructure, including energy, as one of the areas of focus. The Systematic Country Diagnostic 2017 emphasized challenges and opportunities in the energy sector as a continued focus area going forward.

20. **The Project will contribute to climate change mitigation by improving the energy efficiency of the DH system, as well as selected public buildings.** By enhancing the seismic resilience of public buildings, the Project will also contribute to climate change adaptation and resilient development. This scale up of pro-climate action in the Kyrgyz Republic is closely aligned with the World Bank Group's and ECA's Climate Change Action Plan 2017-2020.

C. Proposed Development Objective(s)

Original PDO

The Project Development Objective is to improve the efficiency and quality of heating in selected Project areas.

Current PDO

The PDO of the original project will remain unchanged with the AF and restructuring. As initially envisaged, the project seeks to improve the efficiency and quality of heating in selected Project areas. This objective remains the same after cancellation of Component 2 and additional funding for Component 3 to scale up energy efficiency measures. Neither of these changes affect the original objective.

Key Results

The key results indicators for the parent project include (i) Projected lifetime fuel savings (MJ) (corporate results indicator to capture energy efficiency improvements); and (ii) Percentage of Project beneficiaries reporting an improvement in quality of heating for buildings retrofitted. The results framework for the AF adopts the same indicators



and it is estimated that the AF will generate additional energy savings and GHG emission reduction, increasing the original targets by 25%.

D. Project Description

The main changes to the project scope and components include:

- a) **No changes to Component 1: Improving supply efficiency and quality of the DH system in Bishkek. The component** includes the preparation and implementation of a priority investment program for the DH system operated by BTS and activities to strengthen BTS’ technical, operational, fiduciary, customer orientation and corporate resource management functions.
- b) **Cancelation of Component 2: Piloting efficient and clean heating stoves.** With the cancelation of this component, the USD 5 million IDA grant allocated for this component will be removed from the HSIP. The continued development of the efficient and clean heating stove market is expected to be taken up by a combination of private sector initiatives and assistance via community-oriented IFI projects to bridge the current cost differential between existing stoves and clean and efficient models. The knowledge accumulated during project preparation and implementation and the supporting design and implementation documentation are being publicly accessible on a dedicated website curated by a local NGO (Camp Alatoo).
- c) **Scaling up Component 3: Demonstrating the benefits of energy efficiency improvements in public buildings.** The additional grant funding by SECO will provide joint co-financing to this component, increasing the component from USD 10 million to USD 12.66 million, and allows application of advanced, innovative technologies to enhance the positive effect of the EE retrofit of selected public buildings, while at the same time building capacity within the design and construction market for advanced retrofit measures.

Changes in Results Framework. Given the proposed change in project components, the results framework has been revised. Indicators related to Component 2 are removed. The targets of existing indicators related to Component 3 are revised to reflect the changes brought by additional financing. The key results indicators for the parent project include (i) Projected lifetime fuel savings (MJ) (corporate results indicator to capture energy efficiency improvements); and (ii) Percentage of Project beneficiaries reporting an improvement in quality of heating for buildings retrofitted. The results framework for the AF adopts the same indicators and it is estimated that the AF will generate additional energy savings and GHG emission reduction, increasing the original targets by 25%.

Changes in Financing. Due to the cancelation of Component 2, the total project cost is now US\$43.661million, this figure includes \$23 million in IDA credit and \$8 million in IDA grant for Component 1 as well as a \$10 million in IDA Grant and \$2.661 million in SECO grant for component 3.

Change in disbursement category. [conversion between USD and XDR to be provided by disbursement.] Table 1 shows the new disbursement table after AF.

Table 1: Disbursement Table

| Category | Amount of the Credit Allocated | Amount of the Grant Allocated (expressed in SDR) | Percentage of Expenditures to be Financed (inclusive of Taxes) |
|----------|--------------------------------|--|--|
| | | | |



| | (expressed in SDR) | | |
|--|--------------------|-------------------|---|
| (1) Goods, works, non-consulting services, consultants' services, including audit, Training and Operating Costs under Part A of the Project | 16,300,000 | 5,675,000 | 100% |
| (2) Goods, works, non-consulting services, consultants' services, including audit, Training and Operating Costs under Parts B of the Project | 0 | 7,003,858.33 | 100% up to Effective Date of the Grant Agreement and 71% thereafter |
| Amount Canceled as of July 17, 2019 | 0 | 3,621,141.67 | |
| TOTAL AMOUNT | <u>16,300,000</u> | <u>16,300,000</u> | |

Procurement. Procurement for the proposed additional financing will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011 and revised July 2014 (Procurement Guidelines); and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers" dated January 2011 and revised July 2014 (Consultant Guidelines) and provisions stipulated in the Financing Agreement. A waiver to the application of the New Procurement Framework (NPF) has been granted by CPO (Oct 2, 2018) and the Procurement/Consultant Guidelines apply to both parent project and AF. The project will also be subject to the World Bank's Anti-Corruption Guidelines, dated July 1, 2011. The Furthermore, the client already uses the World Bank's online procurement planning and tracking tools (Systematic Tracking of Exchanges in Procurement [STEP]) to prepare, clear, and update its Procurement Plans and conduct all procurement transactions.

Change in disbursement estimates. The disbursement estimate by year is updated to reflect the new project cost and is in line with current closing date.

E. Implementation

The implementation arrangements remain unchanged. The Financing Agreement for the HSIP was negotiated and concluded between the Ministry of Finance on behalf of the Kyrgyz Republic and the World Bank and approved in October 2017. The Ministry of Finance provides the proceeds of the IDA credit and grant, respectively, to the two Project implementing entities through Subsidiary Agreements: (i) BTS as the implementing entity of Component 1; and (ii) ARIS as the implementing entity of Component 3 (ARIS would have also served as implementing entity for the canceled Component 2).



F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The specific locations of the Project activities to be carried out under AF are determined during Project implementation on a demand-based approach and in accordance with agreed eligibility and selection criteria. Six building sites have been confirmed for the first round of retrofits in 2019 and site-specific ESMPs are being prepared in early 2020.

G. Environmental and Social Safeguards Specialists on the Team

Kristine Schwebach, Social Specialist
Volodymyr Tykhyy, Environmental Specialist
Qing Wang, Environmental Specialist
Alisher Khamidov, Social Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

| Safeguard Policies | Triggered? | Explanation (Optional) |
|--|------------|------------------------|
| Environmental Assessment OP/BP 4.01 | Yes | |
| Performance Standards for Private Sector Activities OP/BP 4.03 | No | |
| Natural Habitats OP/BP 4.04 | No | |
| Forests OP/BP 4.36 | No | |
| Pest Management OP 4.09 | No | |
| Physical Cultural Resources OP/BP 4.11 | No | |
| Indigenous Peoples OP/BP 4.10 | No | |
| Involuntary Resettlement OP/BP 4.12 | Yes | |
| Safety of Dams OP/BP 4.37 | No | |
| Projects on International Waterways OP/BP 7.50 | No | |
| Projects in Disputed Areas OP/BP 7.60 | No | |



KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

Regarding the impact of activities under the AF for Component 3, these are expected to cause some short-term adverse impacts on air, soil, water and acoustic environment, mirroring those expected under the parent HSIP project. These impacts will be temporary and site-specific and will be addressed in site-specific ESMPs which follow the framework set under the HSIP. Social mitigation measures are taken to address the impact of building retrofits on building users (patients, students and kindergarten children) and minimize disruption. Availability of alternate locations will be included in the discussion of ESMPs to ensure no disruption of service delivery. Extensive consultation and communication activities will be undertaken and a set of citizen engagement measures designed to ensure full participation of communities in the preparation of mitigation measures. Further, distrust of authorities will be mitigated by close collaboration with the communities directly affected by the interventions.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area: No irreversible or long term social and environmental impacts are anticipated as a result of AF project activities.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

The selection of public buildings for implementation of AF activities will be carried out on a demand-based approach and in accordance with agreed eligibility and selection criteria, including requirement to minimize adverse impacts. Extensive consultation and communication activities will be undertaken and a set of citizen engagement measures designed to ensure full participation of communities in the preparation of mitigation measures.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The ESMF for the parent project is confirmed for the AF, no new ESMF is prepared but the document will be published prominently on the website of the implementing agency ARIS in view of preparation of site-specific ESMPs: ARIS will assign an experienced Safeguard Specialist responsible for preparing and monitoring implementation of site-specific ESMPs for Component 3 of the parent project, as well as AF, and to cover other environmental and social aspects of Component 3, including compliance with the ESMF. The World Bank safeguards team will provide targeted capacity building activities.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

ARIS has carried out public consultations for groups that may be impacted by activities under parent Project Component 3 before finalization of the RPF and ESMF. These consultations informed potential project-affected people and other stakeholders about potential activities which may have impacts, as defined under World Bank safeguard policy 4.01. During the consultations conducted the main questions raised and answers provided to the concerned parties related to the project design, scope and timing of activities. The project-affected people are usually represented by those who use public buildings where energy efficiency improvements will be carried out. Other interested parties include representatives of local NGOs and local administrations.

These information/awareness-building activity will be supplemented by a grievance redress mechanism (GRM),



operated by ARIS for Component 3 of the parent project and for AF activities. The GRM will also include a proactive element through which ARIS will seek feedback from beneficiaries of energy efficiency improvements in public buildings, including those advanced, innovative technologies that will be implemented under AF.

Extensive consultation and communication activities will be undertaken and a set of citizen engagement measures designed to ensure full participation of communities in the preparation of mitigation measures.

B. Disclosure Requirements (N.B. The sections below appear only if corresponding safeguard policy is triggered)

Environmental Assessment/Audit/Management Plan/Other

| | | |
|-----------------------------|-----------------------------------|--|
| Date of receipt by the Bank | Date of submission for disclosure | For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors |
|-----------------------------|-----------------------------------|--|

"In country" Disclosure

Resettlement Action Plan/Framework/Policy Process

| | |
|-----------------------------|-----------------------------------|
| Date of receipt by the Bank | Date of submission for disclosure |
|-----------------------------|-----------------------------------|

"In country" Disclosure

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting) (N.B. The sections below appear only if corresponding safeguard policy is triggered)



CONTACT POINT

World Bank

Katharina B. Gassner
Senior Energy Economist

Yun Wu
Senior Energy Specialist

Borrower/Client/Recipient

Kyrgyz Republic

Implementing Agencies

Bishkekteploset JSC (BTS)
Erkin E. Abdykalykov
General Director
abderes@teploseti.kg

Community Development and Investment Agency (ARIS)



FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

APPROVAL

| | |
|----------------------|--------------------------------|
| Task Team Leader(s): | Katharina B. Gassner Yun Wu |
|----------------------|--------------------------------|

Approved By

| | | |
|---------------------------|---------------------|-------------|
| Safeguards Advisor: | Nina Chee | 04-Dec-2019 |
| Practice Manager/Manager: | Sameer Shukla | 04-Dec-2019 |
| Country Director: | Bolormaa Amgaabazar | 06-Dec-2019 |

Note to Task Teams: End of system generated content, document is editable from here. *Please delete this note when finalizing the document.*