Note to Task Teams: The following sections are system generated and can only be edited online in the Portal.

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

Appraisal Stage | Date Prepared/Updated: 16-May-2017 | Report No: PIDISDSA20212

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Project Name	Parent Project ID (if any)
Kyrgyz Republic	P157079	Heat Supply Improvement Project	
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
EUROPE AND CENTRAL ASIA	27-Jun-2017	31-Aug-2017	Energy & Extractives
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Ministry of Finance	Bishkekteploset JSC, ARIS	

Proposed Development Objective(s)

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

Financing (in USD Million)

Financing Source	Amount
International Development Association (IDA)	23.00
IDA Grant	23.00
Total Project Cost	**46.00**

Environmental Assessment Category

B - Partial Assessment

Decision

The review did authorize the preparation to continue

Note to Task Teams: End of system generated content, document is editable from here.

Other Decision (as needed)

B. Introduction and Context

Country Context

The Kyrgyz Republic, with a Gross National Income[1] (GNI) per capita of USD 1,250 in 2014, remains one of the poorest countries in the Europe and Central Asia (ECA) region. In 2003-2014, GDP growth averaged just above 4% annually, with significant variations from -0.5% in 2010 to 10.9% in 2013. Underlying these variations have been external shocks (world food and energy price shocks in 2008), domestic events (energy supply crisis in 2009 and political turmoil in 2010), and fluctuations in gold production stemming from both geological factors and ad-hoc events (accident at the Kumtor gold mine in 2012). Mimicking the volatility of economic growth, the poverty reduction trend, while generally declining, was uneven: although the poverty rate declined from 49.7% to 17.4% between 2005 and 2014[2], it has been stagnating since 2009 at around 18%-20% with an uptick in 2013, which underlines the high vulnerability of the population to shocks and economic slowdown. The episodes of economic growth have generally been pro-poor with consumption growth of the bottom 40% being higher than the average (4.7% versus 1% annual consumption growth between 2007 and 2012). As lower income segments gained from growth, inequality indicators have been improving: the consumption-based Gini index declined from 33% in 2005 to 27% in 2014. Nonetheless, important regional disparities exist both in terms of monetary poverty incidence and in terms of access to quality core services.

Sectoral and Institutional Context

Access to reliable and adequate heat supply is critical for the wellbeing of the population and the delivery of public services in the Kyrgyz Republic. Given the cold climate and long heating season, access to reliable and adequate heat supply is an essential need in the Kyrgyz Republic. Access to district heating (DH) 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 have to rely on individual solutions to meet their heating needs during winter, including individual coal-based systems as their primary heating source (used by around 60% of all households), followed by electricity (15%), wood and dung (6%) and gas (1%)[3]. Adequately meeting heating demand, however, remains a daunting challenge for a large part of the population and an estimated 25% of residential and public heat demand in urban areas alone remains unmet every winter due to a number of key challenges the heating sector is facing, as outlined below.

Supply reliability and service quality of the largest DH system is deteriorating. The largest DH system in the country is located in Bishkek and provides heat generated at the Combined Heat and Power (CHP) plant[4] to about 103,000 end-consumers (accounting for more than 70% of all households with access to DH). The CHP plant is operated by the state-owned company Electric Power Plant (EPP) Open Joint Stock Company - owning and

[1] Atlas Method
[2] According to the national poverty estimate (based on the national poverty line), 32.1% of the population in 2015 was considered to live in poverty.
[3] These shares refer to 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] The installed capacity of the CHP plant in Bishkek (after its ongoing modernization) is 791 MW of electricity and 1,225 GCal/hour of heat. The CHP plant mainly uses coal (96%), supplemented by small amounts of natural gas (2%) and mazut (2%).

operating all major power and heat generation assets in the Kyrgyz Republic, including the CHP plants in Bishkek and Osh. The state-owned company Bishkekteploset (BTS) Closed Joint Stock Company operates the heat transmission and distribution network connected to the CHP plant in Bishkek. Overall, the reliability of the DH system in Bishkek is deteriorating as evidenced by the number of network failures per heating season, which increased from around 50 in 1991 to more than 300 in recent years. In terms of quality of supply, around 85% of households with access to DH in Bishkek complain that their apartment is either too warm or too cold. Providing adequate heat supply is particularly difficult during peak hours and at the outskirts of the DH network, where heat and hot water supply are often insufficient, resulting in under-heated apartments and requiring customers to occasionally resort to back-up solutions, such as electric heating.

High heat and water losses on the supply-side are accentuated by the widespread use of norm-based billing practices on the consumer side. Due to its old age and dilapidated condition, the DH network in Bishkek is characterized by high losses: thermal energy and water losses in BTS' network are estimated to account for 29% and 42% of the heat and hot water dispatched from the CHP plant (normalized average in 2013-2016), respectively. These supply-side losses are accentuated by the lack of incentives for energy efficiency on the demand-side, which is mainly due to the absence of control and metering equipment at building- and apartment-level and the related use of norm-based billing practice. In 2016, about 31% of heat energy and 45% of hot water was invoiced based on metering and the rest based on normative consumption. This means that the majority of customers served by BTS are billed for heat and hot water based on norms, rather than actual consumption, with little incentives to consumers to save energy.

Low tariffs have been the key reason for the sector's decline. The underlying reason for the continued decay of assets and financially weak energy sector companies are the low end-user tariffs for heat, hot water and electricity, which remain significantly below cost-recovery levels despite significant improvements in the last three years: in 2014, the Government adopted a new Medium-Term Tariff Policy (MTTP) for electricity, DH and hot water for 2014-2017, and implemented subsequent end-user tariff increases in 2014 and 2015, which were supported under an Energy Sector Development Policy Operation (DPO) and a Governance and Competitiveness DPO. As a result, between December 2014 and April 2015, residential and non-residential tariffs for heat and hot water were increased between 59% and 89%[5]. The impact of this sizeable increase on household expenditures remained relatively modest, as assessed through a quantitative Poverty and Social Impact Assessment (PSIA) conducted in 2016: households in the Kyrgyz Republic spend on average 2.5% of their expenditures on electricity, 3.5% on DH and 2.5% on hot water (if connected to centralized supply)[6]. In order to help mitigate the impact of higher energy prices on the poor and some population groups, the Government has developed several blunt mechanisms, such as increasing compensation to recipients of the so-called Monthly Benefit to Poor Families (MBPF)[7] – a cash transfer program targeting the poor – pensioners and public servants. While the tariff increases helped to improve sector revenue, as of 2016, end-user tariffs for heat and hot water are estimated to remain between 33% and 63% of cost recovery. In addition, ahead of elections scheduled to take place in fall 2017, the continued implementation of end-user tariffs as per MTTP has been suspended and is expected to be resumed only in 2018.

[5] Specifically, in 2014-2015, residential heat tariffs were increased by 59% (from Som 715/GCal to Som 1,134/ Gcal), and for other consumers groups by 82% (from Som 929/Gcal to Som 1,695/Gcal); and domestic hot water tariffs for residential consumers were increased by 89% (from Som 518/Gcal to Som 981/ Gcal), and for other consumers by 82% (from Som 929/ Gcal to Som 1,696/ Gcal).

[6] The shares are estimated relative to total household consumption expenditures. In terms of total household income, the spending on energy is higher.

[7] Though the MBPF represents an important building block of a safety net, it suffers from problems of low coverage, leakage, and inadequate benefits.

Given the limited access to DH and lack of viable alternatives, the majority of Kyrgyz households, especially among lower income segments, relies on traditional solid fuel-fired stoves as their primary heating source. Among households without access to DH, close to two thirds in urban and rural areas and one fifth of households in Bishkek use a traditional coal-fired stove as their primary heating source (totaling about 532,000 households). The second most common heating system in use are simple coal-fired low pressure boilers (LPBs), installed in 37% of households in Bishkek and around 10% in urban and rural areas, respectively. Viable alternatives to traditional solid fuel-based heating systems remain limited in the short-to medium-term, in particular for low income households: (i) given the recurrent winter power shortages and the already strained capacity of the electricity network, increasing the use of electricity for heating purposes is not a viable alternative – rough estimates indicate that a switch to electricity by households currently using solid fuel would increase winter peak load by about 50%; (ii) access to gas remains limited to wealthier households in Bishkek and select cities as no significant expansion of the gas network and supply to new residential customers is planned in the next five years; (iii) taking into account the daunting challenges in the DH sector and its lack of viability in low density areas, access to centralized heating will remain limited to major urban centers; and (iv) renewable energy resources for space heating are limited (e.g. there are no sizeable renewable biomass resources, and other renewable energy resources, such as solar or geothermal, are not yet financially viable for space heating purposes at household level).

Traditional stoves and LPBs in use are highly inefficient, polluting and result in low comfort levels. The thermal efficiency of stoves and simple LPBs in use by the majority of Kyrgyz households is limited to around 25%-40%. As a result, fuel consumption and related household expenditures are unnecessarily high and could be reduced by about 45%-50% (depending on the current comfort levels) by switching to more efficient models. On average, households without access to DH spend between 7% and 12% of their expenditures on heating, with low income households and households using gas spending the most. In addition, the current stoves and LPBs are often polluting and emit large amounts of carbon monoxide (CO) and fine particulate matters ($PM_{2.5}$), causing indoor and outdoor air pollution with negative health and environmental impacts. In particular women and children who spend more time at home are negatively impacted by indoor air pollution – over half of the children and adults surveyed as part of the trial phase showed signs of cough, headaches and other discomforts, especially after ignition and refueling of the stoves. Close to 90% of households surveyed confirmed that their stove/LPB causes heavy smoke during ignition and refueling with detrimental impact on their home environment and health. In addition, traditional heating stoves and LPBs currently in use often provide insufficient comfort levels, including inadequate indoor temperatures and/or reduced living space during winter months, frequent need for refueling and extensive cleaning needs of chimneys.

Women, children and elderly are impacted the most by inadequate heat supply as they spend more time at home. In households without DH, at times when women are home alone, they report not heating it to full comfort levels in order to save energy (costs). Households also indicate limiting the heating space by occupying only one room and closing down the rest of the house for winter in order to reduce heating expenses[8]. Women are usually also responsible for cooking and refueling the stoves, which makes them more exposed to indoor air pollution caused by insufficient burning of solid fuel.

High heat losses of buildings exacerbate inefficient and inadequate heat supply. The Kyrgyz Republic ranks among the 15 most energy intensive developing countries worldwide. The buildings sector is one of the main energy consumers, in particular in terms of electricity consumption, which continues to grow at a fast pace. While the

[8] World Bank, 2014, Poverty and Social Impacts of Energy Reforms in the Kyrgyz Republic: Summary of Qualitative Assessment.

public sector accounts for about 10% of total electricity consumption, its consumption has increased by 37% in the last couple of years. This trend is partially driven by the low energy efficiency of the aging public buildings stock, which was constructed 25-60 years ago during the Soviet period without any energy efficiency considerations. 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 2015[9] confirmed that, on average, around 20-30% of the heat demand in public buildings in urban areas remains unmet every year due to high heat loss of buildings combined with insufficient and unreliable heat and electricity supply. As a result, many public buildings are severely under-heated with negative impact on public service delivery, comfort levels and well-being of students, toddlers and staff. In addition, while the territory of the Kyrgyz Republic is subject to high seismic hazards, according to a recent study, about 80% of schools and kindergartens in the country have low seismic safety ratings and are likely not compliant with the local seismic safety regulation.

The Government recognizes the importance of improving the efficiency and quality of heat supply. Reducing the reliance on electricity for heating purposes during winter months, cutting technical and commercial losses in the DH sector and improving access to reliable and efficient heating services for the population figure among the key priorities of the Government in the heating sector, as reflected in the National Sustainable Development Strategy and the long-term Strategy for Heat Supply (2004-2015). In recent years, the Government initiated a number of actions to help improve the operational and financial performance in the energy sector: (i) establishing the State Regulatory Agency for the Fuel and Energy Complex as the single economic regulator for the energy sector; (ii) adopting the MTTP for heat, hot water and electricity (2014-2017), and implementing related end-user tariff increases in 2014-2015; (iii) revising the tariff setting methodology for power and heating companies; (iv) approving and implementing a performance reporting and monitoring framework, which includes monitoring and publishing of quarterly service quality indicators for power and heating companies; (iv) ongoing modernization of the CHP plant in Bishkek to improve heat generation reliability and efficiency; and (iii) adopting action plans to help reduce the electric load from public buildings, including options such as installation of solar panels, solar water heating, consumption limits and fuel switching of heating systems.

C. Proposed Development Objective(s)

Note to Task Teams: The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet.

Development Objective(s) (From PAD)

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

Key Results

The proposed key results indicators for the Project include: (i) projected lifetime energy savings (MJ); and (ii) percentage of Project beneficiaries reporting an improvement in quality of heat supply.

D. Project Description

[9] World Bank, 2015, Keeping Warm: Urban Heating Options in the Kyrgyz Republic.

The Project consists of three components: (1) Improving supply efficiency and quality of the DH system in Bishkek; (2) Piloting efficient and clean heating stoves; and (3) Demonstrating the benefits of energy efficiency improvements in public buildings.

COMPONENT 1: Improving supply efficiency and quality of the DH system in Bishkek. This Component will support priority investments and capacity building activities aimed at improving the supply efficiency and quality of the DH system in Bishkek. The Component will be implemented by BTS and consist of two Subcomponents.

Subcomponent 1.1: Priority investment program for DH rehabilitation. This Subcomponent will support the preparation and implementation of a priority investment program for the DH system operated by BTS, including related goods, works and consulting services. The investment packages were selected based on a comprehensive technical and economic assessment of BTS' DH system completed in 2015, and include:

- *Package 1: Modernization of individual heat substations (IHS) at building-level.* This package will support the installation and upgrade of IHS in about 1,900 residential multi-apartment buildings, including the installation of heat and hot water meters; and the installation of a preventive maintenance information system for substations.
- *Package 2: Replacement and reconstruction of the 'Vostok' transmission pipeline*. This package will finance the replacement, rerouting and reconstruction of the most dilapidated sections of one of the five main transmission pipelines ('Vostok' transmission pipeline) with pre-insulated underground and above-ground pipes.

The following benefits are expected as a results of the two priority investment packages: (i) saving heat and hot water by decreasing technical and commercial network losses and reducing end-user consumption; (ii) improving the quality of heat supply through better temperature and flow control at building-level; (iii) enhancing supply reliability by preventing further dilapidation of sections along an essential transmission pipeline, which provides heat to about 31% of BTS' customers; (iv) increasing heat and hot water transmission capacity to end-consumers; (v) introducing consumption-based billing for 56% of BTS' customers through the installation of building-level heat and hot water meters; and (vi) improving BTS' maintenance practices and reducing emergency interventions through the installation of a preventive maintenance information system and implementation of the proposed investment packages.

Subcomponent 1.2: Operational capacity strengthening and Project implementation support. This Subcomponent will finance activities aimed at strengthening the technical and operational capacity within BTS, and ensure effective Project implementation.

COMPONENT 2: Piloting efficient and clean heating stoves. This Component aims to pilot efficient and clean heating solutions for households that don't have access to DH and are relying on traditional, inefficient and polluting solid fuel-fired heating stoves and Low Pressure Boilers (LPBs). It will be implemented by the Community Development and Investment Agency (ARIS) and consists of two Subcomponents.

Subcomponent 2.1: Incentive program for low income households. This Subcomponent will support an incentive program for eligible low income households in selected pilot rayons to provide access to affordable, efficient and clean solid fuel-fired heating stoves and LPBs. The incentives aim to help: (i) promote the development of a local market for efficient and clean heating technologies by fostering demand and facilitating quick market penetration; and (ii) improve the heating situation for poor households by providing access to affordable, efficient and clean

solutions. Eligible households are expected to contribute part of the cost of eligible models in order to ensure ownership and enhance program sustainability. Stoves and LPBs promoted as part of the Project will have to meet a number of minimum performance criteria, including: thermal efficiency of 70%; maximum $PM_{2.5}$ emissions and CO emissions; and other eligibility criteria related to the durability and safety of eligible products.

Estimated coverage and expected benefits: It is expected that around 14,000 efficient and clean heating stoves and LPBs will be installed in eligible low income households in the seven pilot rayons. Based on the results of a trial phase and experience from similar projects in other countries, switching from traditional, inefficient and often polluting heating technologies to efficient and clean models is expected to generate multiple benefits for households, the economy and the environment, including: (i) reducing solid fuel consumption and related household expenditures by 45%-50% through an improvement of the thermal efficiency to more than 70%; (ii) decreasing $PM_{2.5}$ and CO emissions, which will help to reduce households' exposure to indoor air pollution and related health costs, in particular for women, children and pensioners who spend more time at home; (iii) improving comfort levels by enabling households to heat their homes to more adequate temperature levels; and (iv) enhancing user convenience by extending the stove burning duration (and reducing the related need for constant refueling) from currently 1-3 hours to up to 12-15 hours.

Subcomponent 2.2: Stimulation of production and use of efficient and clean stoves. This Subcomponent aims to stimulate the production and use of efficient and clean heating technologies through capacity building and awareness raising for suppliers, households and other stakeholders. Subcomponent 2.2 will build on ongoing technical assistance and awareness raising activities implemented with the support of Trust Fund resources provided by the Energy Sector Management Assistance program (ESMAP) and the Central Asia Energy Water Development Program (CAEWDP).

COMPONENT 3: Demonstrating the benefits of energy efficiency improvements in public buildings. This Component aims to demonstrate the benefits of energy efficiency investments in selected public buildings and will help to build local market capacity in preparing and implementing energy efficient and seismic building retrofits. The Component will be implemented by ARIS and consists of two Subcomponents.

SUBCOMPONENT 3.1: Energy efficiency investments in public buildings. This Subcomponent consists of two activities and will finance energy efficiency and seismic investments in selected public buildings in the education and health sectors (e.g. schools, kindergartens, hospitals and clinic centers) as well as related capacity buildings activities. The Subcomponent aims to demonstrate the multiple benefits of energy efficiency by building on the social outreach capacity of public facilities, focusing on buildings that use electric-based heating in order to maximize electricity savings, and disseminating achieved Project results combined with public awareness activities. Expected benefits to be demonstrated include: electricity and cost savings, improved comfort levels (e.g. in terms of temperature, indoor climate and lighting), enhanced building resilience and improved building functionality for public service delivery.

Activity 1: Energy efficiency investments in selected buildings. This activity will finance energy efficiency and seismic investment measures in selected public buildings. Buildings will be selected based on call for nominations to Oblasts in accordance with agreed eligibility and selection criteria, including energy efficiency and social impact considerations. In each of the selected buildings, energy audits and seismic assessments will be conducted to identify the economically most viable energy efficiency measures and seismic reinforcements needed to comply with the local regulation. Eligible measures will include: building envelope measures; heating and cooling system upgrades; lighting; other viable energy saving measures; and seismic reinforcement measures.

Activity 2: Capacity Building on energy efficiency. This activity aims to strengthen local capacity and awareness on energy efficiency, and will build on ongoing technical assistance provided with the support of ESMAP resources. Specific areas for support will include: (i) targeted training to local firms (e.g. local energy audit companies, design firms, construction companies and other energy service provides); (ii) public awareness and information campaigns on energy efficiency; and (iii) support for the implementation of a Roadmap on energy efficiency in the public buildings sector, which is currently being developed.

SUBCOMPONENT 3.2: Project Implementation Support for Components 2 and 3. This Subcomponent will provide support for effective implementation and management of Components 2 and 3.

E. Implementation

Institutional and Implementation Arrangements

BTS will be the implementing entity of Component 1; and ARIS will be the implementing entity of Components 2 and 3. The State Committee for Industry, Energy and Mining assumes the overall policy responsibility for the preparation and implementation of the Project. A Project Advisory Committee, chaired by the State Committee for Energy and involving key stakeholders, will be set-up to facilitate coordination and provide strategic advice during implementation.

Note to Task Teams: The following sections are system generated and can only be edited online in the Portal.

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

Project activities under Component 1 are located in the urban setting of the country's capital Bishkek. Civil works to rehabilitate and/or replace the selected transmission pipelines will be carried out along or under automobile and railway roads. The specific location of the Project activities to be carried out under Components 2 and 3 will be determined during Project implementation on a demand-based approach and in accordance with agreed eligibility and selection criteria. Pilot rayons for implementation of Component 2 will be determined based on their poverty rate.

G. Environmental and Social Safeguards Specialists on the Team

Volodymyr Tykhyy,Ekaterina Romanova

SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	OP 4.01 on Environmental Assessment (EA) is triggered as the proposed activities under Component 1 (DH rehabilitation/ Vostok transmission pipeline rehabilitation) and Component 3 (energy efficiency improvements in public buildings) might generate some environmental impacts such as dust, noise, soil removal and destruction, occupational hazards, traffic disruptions, construction wastes, etc. To address these issues, the borrower has prepared an Environmental and Social Management Framework (ESMF) which is based on World Bank and national EA rules and procedures. The ESMF has been chosen as the environmental safeguards instrument because the exact alignment of the Vostok transmission pipeline supported under Component 1 will be finalized as part of its detailed design, and given that Component 2 and 3 are demand-based, thus, the exact location of subprojects supported under these components are not yet known. The ESMF has been publicly consulted and disclosed in-country on April 18, 2017, and on the World Bank's website on April 26, 2017. For each subproject under Components 1 and 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. Parallel financing is expected to be provided by the Russian-Kyrgyz Development Fund (RKDF) to reconstruct an additional section of the Vostok transmission pipeline. As this activity is directly and significantly related to the Bank-assisted Project, it is considered as ancillary aspect of the Project. As a result, World Bank safeguards policies, including OP 4.01, apply to it. The reconstruction of the Vostok pipeline section to be financed by RKDF will be timed to coincide with a road expansion project that is

		planned and financed by Bishkek Municipality so as to minimize impacts and disruptions for the population, the environment and economic activities. While the planned road construction is contemporaneous with the reconstruction of the pipeline section to be financed by RKDF, it is unrelated to the Project and there is no mutual dependency between the road expansion and the Project aside from efficiency gains for the client and reduced impact on the population and the environment. Therefore, any impacts due to the road expansion do not fall under the scope of the World Bank safeguards policies and OP 4.01 does not apply in this case. No adverse environmental impacts are anticipated from Component 2, provided that stove designs and stove producers meet the eligibility criteria (as included in the OM and listed in ESMF). A provision will be included in the contracts of stove distributors/installers to ensure that they have agreements with companies which will take the old stoves for dismantling and disposal. In addition, safety checklists will be included in the acceptance protocol to be developed for delivered stoves.
Natural Habitats OP/BP 4.04	No	OP4.04 is not triggered as project activities will be implemented within city boundaries and no Natural Habitats (Forest areas) will be affected.
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	While no physical displacement or land acquisition is expected under this Project, activities under Component 1 - such as excavation and rehabilitation of transmission and distribution networks - may result in temporary land acquisition, access restrictions and/or disruption of livelihoods. Based on this, OP/BP 4.12 on involuntary resettlement has been triggered. At the time of Project appraisal, while the corridor of the transmission pipeline is known, the exact siting alignment and the scale of civil works are yet to be clarified as part of the detailed design and technical specifications for civil

		works, thus a Resettlement Policy Framework (RFP) was prepared and disclosed in-country and the World Bank website on March 27, 2017. The RPF provides guidelines for resettlement-related activities and for preparation of a site-specific Resettlement Action Plan (RAP). It details a range of potential impact and includes an entitlement matrix. Once the Project design is finalized and the Project impact is known, a site-specific Resettlement Action Plan (RAP) will also be prepared during Project preparation, if needed. Parallel financing is expected to be provided by RKDF to reconstruct an additional section of the Vostok transmission pipeline. As this activity is (i) directly and significantly related to the Bank-assisted Project; (ii) and is carried out contemporaneously with the Project, the OP/BP 4.12 applies to it. The reconstruction of the Vostok pipeline section to be financed by RKDF is expected to be implemented before Project effectiveness in order to synchronize required civil works with a road expansion project that is planned and financed by Bishkek Municipality. For the same reasons as outlined under OP 4.01, any impacts due to the road expansion do not fall under the scope of the World Bank safeguards policies and the OP 4.12 does not apply in this case. No resettlement instruments for the activities financed by the RKDF have been prepared.
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:

There is limited resettlement impact envisioned as a result of activities under Component 1. Component 1 and 3 are expected to cause some short-term adverse impacts on air, soil, water and acoustic environment, which will be

temporary and site-specific.

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 activities in the selected Project area.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
As part of the detailed design for the planned transmission pipeline replacement and reconstruction, alternatives to avoid or minimize adverse impacts will be considered.

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.
Activities under Component 1 are implemented by Bishkekteploset JSC (BTS). While BTS has no prior experience of implementing World Bank-financed projects and has limited understanding of related safeguards requirements and reporting, it has hired an experienced safeguards consultant to prepare environmental and resettlement instruments (i.e. RPF, ESMF). This consultant has worked on a number of World Bank-financed projects in the Kyrgyz Republic and has extensive knowledge of national and Bank requirements vis-à-vis environmental and social safeguards, including involuntary resettlement.

BTS will be responsible for preparing and monitoring implementation of site-specific ESMPs for each section of the reconstructed pipeline. To ensure adequate implementation capacity, the PIU will hire in a timely manner an experienced Safeguard Specialist based on Terms of Reference satisfactory to the World Bank. This specialist will cover environmental and social aspects of Component 1, including compliance with the ESMF, ESMPs and RAP, requirements of the national legislation of the Kyrgyz Republic, and tracking operation of grievance mechanisms.

ARIS will assign an experienced Safeguard Specialist responsible for preparing and monitoring implementation of site-specific ESMPs for Component 3, and to cover other environmental and social aspects of Component 2 and 3, including compliance with the ESMF.

The World Bank safeguards team will provide targeted capacity building activities. The implementing agencies' safeguards specialist as well as other relevant staff may also enroll into the regional safeguards trainings supported by the World Bank.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.
Key stakeholders of the Project include: beneficiaries and their communities in Bishkek city and across the country as well as the Government of the Kyrgyz Republic.

BTS and ARIS have carried out public consultations for groups that may be impacted by activities under Project Components before finalization of the RPF and ESMF. These consultations inform potential project-affected people and other stakeholders about potential activities which may have impacts, as defined under World Bank safeguard policies 4.01 and 4.12. 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 live near construction sites, as well as by households that may benefit from efficient and clean stoves. Other interested parties include representatives of local NGOs and local administrations. Furthermore,

ARIS will conduct awareness raising activities in participating communities under Component 2 to familiarize the beneficiaries with the stoves program and with the way to safely operate the new stoves.

These information/awareness-building and demand-side processes will be supplemented by a grievance redress mechanism (GRM) - operated by each of the implementing entities for its respective Component - which will cover all aspects of Project implementation, including, inter alia, grievances related to involuntary resettlement. The GRM will also include a proactive element through which ARIS will seek feedback from beneficiaries of installed efficient and clean stoves, as well as the establishment of systems for receiving and processing unsolicited comments/complaints. GRM data will be collected, compiled and reported to the implementing entities and the World Bank, including an analysis of the different types of complaints.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank	Date of submission to InfoShop	For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors
17-Apr-2017	26-Apr-2017	

"In country" Disclosure

Kyrgyz Republic

18-Apr-2017

Comments

Disclosed on BTS and ARIS website.

Resettlement Action Plan/Framework/Policy Process

Date of receipt by the Bank	Date of submission to InfoShop
27-Mar-2017	27-Mar-2017

"In country" Disclosure

Kyrgyz Republic

27-Mar-2017

Comments

Disclosed on the BTS website.

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?
Yes
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?
Yes
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?
Yes

OP/BP 4.12 - Involuntary Resettlement

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?
Yes
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
Yes

The World Bank Policy on Disclosure of Information

Have relevant safeguard policies documents been sent to the World Bank's Infoshop?
Yes
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
Yes

All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes

Have costs related to safeguard policy measures been included in the project cost?
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

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APPROVAL

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Note to Task Teams: End of system generated content, document is editable from here.