UNITED NATIONS DEVELOPMENT PROGRAMME
Regional Hub for Europe and the CIS
Project Document

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Project Title: Energy Access SMEs Development Project
Project Number: 00106776
Implementing Partner: UNDP Istanbul Regional Hub for Europe and the CIS
Start Date: 01/01/2018 **End Date:** 30/06/2020 **PAC Meeting date:** 01/12/2017

Brief Description

This project builds upon experiences from the UNDP Green Villages initiative implemented in Tajikistan and the Kyrgyz Republic during the last two years. The project goal is to offer a comprehensive strategy to scale-up private sector engagement in energy access by improving the risk-return profile of private investment in energy access products and services. The key objective of the project is to expand energy access and provide reliable, affordable and sustainable energy products and services for the rural population of Tajikistan and the Kyrgyz Republic who are facing energy poverty, through promoting scalable, private sector-led business models and derisking their investment.

This project offers a comprehensive strategy to scale-up private sector engagement in energy access by improving the risk-return profile of private investment in energy access products and services. The project will focus on introducing new technologies and energy services in selected villages through the following three interlinked components: i) Enabling policy framework and capacity development for green energy SMEs, ii) Improved access to finance and piloted business models for green energy SMEs and energy service users, and iii) Improved access to sustainable energy services in remote rural areas – on a household, public buildings and village level.

Contributing Outcome:

Outcome 1: Accelerating structural transformations through more effective governance systems

Output 1.7: Solutions developed, financed and applied at scale for transformation to clean energy and zero-carbon development, for poverty eradication and structural transformation

Gender marker: GEN2

Total resources required:		$2,406,000
Total resources allocated[1]:		$2,406,000
	OFID:	$800,000
	UNDP (parallel funding):	$1,050,000
	Government parallel:	$180,000
	Other donors parallel:	$376,000
Unfunded:		n/a

Agreed by:

UNDP

Gerd Trogemann, Manager, Istanbul Regional Hub

Date: 22/12/2017

[1] Details for parallel funding are provided in Annex 4

I. DEVELOPMENT CHALLENGE

Approximately 70% of the Tajik people suffer from **extensive shortages of electricity during the winter**. These shortages, estimated at about 2,700-4,000 GWh/year (or up to 1/3 of winter electricity demand), impose economic losses of around 3% of the GDP. In addition to the financial costs, inadequate power supply leads to major development and environmental problems, such as health impacts from indoor air pollution and extreme winters, large-scale deforestation, and GHG emissions from coal, wood and diesel oil combustion by rural residents in winter. WHO lists Tajikistan among the 20 worst- affected countries for diseases resulting from indoor air pollution. Rural children are forced to study in poorly heated class rooms with indoor temperature below 10°C and substantial time collecting fuel wood to heat their homes. Energy access is a similarly large and multi-faceted problem in rural areas of the Kyrgyz Republic, which is listed as the second most affected country in Europe and Central Asia for disease resulting from indoor air pollution. The Kyrgyz Republic has also been struggling with recurrent winter energy shortages, which causes socio-economic burdens for the population and economy.

The unmet demand for electricity combined with households' current spending on alternative fuels in the winter, represent **a potentially large market opportunity for decentralized energy services in rural areas,** and simultaneously an opportunity to alleviate poverty and boost local economic development. This business niche is not yet actively pursued by entrepreneurs due to the presence of many market barriers which the project will address. Seeking to address the winter energy shortages, the government in Tajikistan focused on coal power plants (with very low efficiency and environmental standards), and the construction of a large hydro power plant (HPP) which will take at least 5-10 more years. Alternative green energy technologies have not been implemented yet in the two countries. Despite substantial renewable energy sources, both countries suffer from energy shortages, especially in rural and mountainous areas. The main reasons for this situation are: the long-standing tradition of using fossil fuels, lack of experience, and high initial costs of introducing alternative energy systems and hybrid mini-grids.

Energy poverty affects women and men differently in terms of roles and access to resources. Domestic energy expenditures are high, with rural households spending on average 10% of total income on energy (and up to 15% in winter). The burden is especially heavy on the poorest rural households, which spend 24% of total income on energy during the heating season. In both countries, remittances are a key coping mechanism for high energy expenses. Most labor migrants (majority men) leave in early summer and return to Tajikistan in late fall or winter, so remittances are often brought or sent in the summer or early fall specifically for the purchase of winter fuels. In addition to this, women and children spend more time than men on fuel use and collection. Rural households being reliant on solid fuel for cooking and water heating also impacts women's time use (that they can dedicate for income generating activities) and health as they are more likely to be exposed to air pollution. Children and the elderly are also susceptible to respiratory health problems due to burning solid fuels, and female family members usually bear the responsibility of caring for relatives when they are ill.

Starting recently, there is a **growing interest among rural residents and entrepreneurs** in the construction of micro and mini hydropower plants to overcome the deficiencies of centralized power supply. Based on government efforts to promote the sector over the last 20 years, there are now 230 private or semi-private small hydro power (SHP) operators throughout the Tajikistan, operating off-grid to provide electricity to nearby communities and businesses. For example, SHP "Panchrud" (630kW) is one of the most recent additions: this 100% private SHP has ensured uninterrupted power supply to three nearby villages (over 5,000 people), two rural hospitals and two schools. However, such private initiatives are rare and limited in scale. The 230 private SHPs represent a total installed capacity of 55 MW, less than 1% of total power generation capacity in the country. Private SHPs usually deploy inefficient "do-it-yourself" or second-hand technology and suffer from lack of professional operational and maintenance services.

Low tariffs were one of the main obstacles for slow inclusion of private actors in both countries, but there are promising improvements already in place. In Tajikistan, tariffs already went up 20% in November 2016, and 10-15% more in March 2017, as a result of negotiations between IFIs and the Government. Independent Power Producers (IPPs) in Tajikistan operate in accordance with the law on the "Use of RES" according to which the tariffs for the electricity are regulated through the Agency for Antimonopoly Services. One private sector IPP, Pamir Energy, operates under a concessional

agreement signed for a period of 25 years, which allows the company to increase tariffs periodically. The current tariff for electricity provided by Pamir Energy is the highest in the country, 3.75 US cents per kW for the population and 5.16 US cents per kW for non-residential clients. In the Kyrgyz Republic, tariffs do not reflect cost but are based on affordability and social considerations and include cross-subsidization among the different consumer groups. The government has recognized that end-user tariffs do not recover the cost of the service provided and they needed to be increased, and in 2016 discussions were initiated to increase tariffs by 20% - still going on due to the sensitivity regarding energy tariffs. Mini-grids usually bear higher costs of electricity when compared to regular tariffs. However, the mini-grid pilot projects conducted by UNDP in Tajikistan (such as in the Burunov or the Sorwo villages) show that with an initial grant covering 30 to 50% of the total investment costs, the cost of energy produced from mini grid is significantly reduced down to the regular tariffs levels.

In both countries, **the willingness to pay (WTP)** is much higher in rural than in urban areas. According to a World Bank study (Tajikistan's Winter Energy Crisis: Electricity Supply and Demand Alternatives, World Bank, 2012), consumers' willingness to pay is 2.5 times higher in rural areas than in urban areas. Moreover, people recognize that the highest price they pay is the price of non-existent energy. The study finds out that WTP for residential customers is 4.6 cents/kWh and 10,4 cents/kWh for rural areas. According to the same study on Tajikistan, the ability to pay goes even more in favor of new efficient technologies. Most of the households contacted in villages targeted by the UNDP Green Village project are spending around $10 monthly on fuel costs for heating and lighting (such as kerosene for lights or biomass to cook/heat). This means that a return of investment for example in a small PV system with a battery and energy efficient cookstove is between 12-18 months.

In both countries, private companies are active in selling diesel oil, coal and wood, as well as electric heaters in rural areas. When solar PV or solar heating are concerned, the market is at a very nascent stage in both countries. Solar water heating is a promising alternative for both countries where it can cover up to 80% of households' hot water daily during 10 months a year and significantly reduce the use of fuel and electricity. Under the current circumstances, green energy services and products by the private sector will continue to be negligible due to the existence of several investment risks, which result in high financing costs. For example, commercial lending rates for green private sector activities are in excess of 25%, along with loan short terms (tenors) and high collateral requirements. The current risk-return profile of green energy activities is unattractive to existing or potential entrepreneurs and limited private capital is currently flowing to this sector.

As a result of pilot project performed by UNDP on energy access in rural areas in period 2015 - 2017, a few SMEs (or informal groups gathered around women associations) started producing and maintaining do-it-yourself solar thermal systems, energy efficient cook stoves, energy efficient doors and windows, and are using agricultural waste biogas systems. These systems were already tested in several villages in Tajikistan and the Kyrgyz Republic, and proved cheap source of heat energy. The pilot project showed that there is a great potential for using green technologies that can address the energy market demand and provide energy access to rural areas and provide sustainability.

II. STRATEGY

The current project falls under the Outcome 1 or the Regional Program Document (2018-2021) "accelerating structural transformations through more effective governance systems". More specifically, the project responds to the Regional Programme commitment to address "gaps in access to modern, affordable, and sustainable energy, as well as raising energy efficiency levels and increasing the shares of renewables in national energy balances, by de-risking energy investments in the region along with engaging the private sector".

The project goal is to offer a comprehensive strategy to scale-up private sector engagement in energy access by improving the risk-return profile of private investment in energy access products and service.

The project objective is to expand energy access and provide reliable, affordable and sustainable energy products and services for rural populations of Tajikistan and Kyrgyz Republic through promoting scalable, private sector-led business models and derisking their investment.

Development impact

The project directly contributes to the following Sustainable Development Goals (SDGs) and targets:

SDG 1 on Poverty, target 1.4 (equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance);

SDG 4 on Quality Education, target 4.4 (substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship);

SDG 5 on Gender Equality, target 5.4 (recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate);

SDG 7 on Affordable and Clean Energy, all targets;

SDG 8 on Decent Work and Economic Growth, target 8.3 (Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services);

Throughout the project, and particularly during the consultations with energy sectors in both countries, participation of women's networks and gender equality experts will be ensured in order to inform policy planning.

The project will also support knowledge and experience transfer among the two beneficiary countries as well as within the wider region. It will also help all ECIS countries bring new ideas on sustainable energy and low carbon and climate resilient solutions.

Theory of change

The Theory of Change (ToC) underlying this approach builds upon UNDP's De-risking Renewable Energy Investment (DREI) methodology (available at www.undp.org/drei). DREI is based on the premise that one of the principal challenges for scaling-up investment in energy access is to lower the high financing costs that negatively affect energy generating system's competitiveness against baseline technologies. As these higher financing costs reflect barriers and associated risks in the investment environment, a key entry point for policy-makers is to address these risks via a combination of three core types of measures that will also be implemented in this project:

(i) Policy-enabling measures (through work with ministries and other stakeholders);

(ii) Improved access to financial de-risking instruments and seed-funding for both green energy SMEs and final beneficiaries;

(iii) High-quality technologies (ensuring only tested and quality equipment will be promoted and implemented).

In line with the DREI approach, the proposed project consists of several interlinked outputs dealing with policy de-risking, high-quality technology, financial de-risking and financial incentive schemes.

A theory of change diagram is provided below presenting the analytical flow from the development impact level to overall outcome and output, to project level results and planned interventions. The theory of change will be regularly reviewed and updated if and when needed through the Project Board mechanism.

Development impact	Ensure access to affordable, reliable, sustainable and modern energy for all (SDG7)	Equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property (SDG1.4)	Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (SDG4.4)	Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate (SDG5.4)	Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services (SDG8.3)
Outcome	SP Outcome 2. Accelerate structural transformations for sustainable development RP Outcome 1. Accelerating structural transformations through more effective governance systems RP Signature solution 5: Close the clean energy gap; Output 1.7. Solutions developed, financed and applied at scale for transformation to clean energy and zero-carbon development, for poverty eradication and structural transformation				
Compon-ent	1) Enabled policy framework created and capacity development for green energy	2) Access to finance enabled and business models for green energy SMEs and energy service users piloted	3) Access to sustainable energy services in remote rural areas provided		
Results	5 SMEs established, policy and technology risks addressed, capacities on renewable solutions and financial mechanisms improved	Financial risks reduced, business models for energy access developed	Energy access provided in 5,000 households, 20 public buildings and 8 villages		
Activities	1.1 Develop and implement enabling policies and regulations for energy access for SMEs 1.2 Build capacities of local stakeholders	2.1 Establish Energy Access Funding Platform 2.2 Enable individual consumers to purchase their own energy access technology 2.3 Provide support to SMEs	3.1 Support green energy access for 5,000 households 3.2 Support energy access in 20 public buildings 3.3 Support 8 mini-grids in selected villages		
Assumpti-ons	Governments willing to improve regulatory frameworks to enable independent service providers SMEs are willing to participate in providing energy access No project implementation delays				
Risks	Lack of interest to change policies for improving energy access	Lack of interest from crowdfunders to support crowdlending in Tajikistan Lack for SMEs to invest in microgrids	Delay or technical problems installing minigrids Lack of SMEs to invest in public buildings Lack of interest from households in energy access technologies		

III. RESULTS AND PARTNERSHIPS

To help achieve its objective, the project will be implemented through the **following three components:**

1) Enabling policy framework created and capacity development for green energy provided
2) Access to finance enabled and business models for green energy SMEs and energy service users piloted
3) Access to sustainable energy services in remote rural areas provided

Component 1: Enabled policy framework and capacity development for green energy

This component addresses policy and technology risks that energy access enterprises/SMEs face by 1) supporting the development and implementation of an enabling policy framework, and 2) improving the skills and capacities for SMEs and final project beneficiaries to provide and use green energy products and services. Two main activities are envisaged under this component:

Activity 1.1 Develop and implement enabling policies and regulations for energy access for SMEs, in direct cooperation with national ministries in charge of energy, economic development and other governmental partners in Tajikistan and the Kyrgyz Republic. Most of the policy level work in Tajikistan will be covered by the UNDP/GEF project.

- In Tajikistan - review relevant energy/renewable energy legislation, as well as legislation regulating the functioning of small and medium enterprises, in order to propose changes to remove barriers and enable companies/energy service providers (RESCO-type) to offer their services on the market in residential and public sectors (hospitals, schools, etc.) – similar to the existing Pamir Energy model[2].
- In the Kyrgyz Republic, facilitate discussion among all relevant stakeholders (through a round table or similar activity) to initiate regulatory changes and adopt policy package to allow companies/energy service providers (RESCO-type) to offer their services on the market, similarly to the system developed for Tajikistan. Ensure that women NGOs are included in the consultation processes.
- In Tajikistan, review and assess regulation relevant for providing fiscal and other incentives for green energy SMEs, with a particular focus on women-led companies and cooperatives, and develop recommendations for improvements.
- In both Tajikistan and the Kyrgyz Republic, develop and adopt regulations relevant for for streamlined green energy product certification and related quality and performance standards (e.g. develop by-laws, manuals and guidelines to set up national minimal standards for green energy technologies).

Activity 1.2 Build capacities of local stakeholders, including SMEs and final project beneficiaries on energy access and energy efficient equipment, products and services through establishing and capacitating two Energy Access Centers[3] to become info-educational centers:

- In both countries, support the Energy Access Centers with equipment, knowledge and tools to be able to disseminate knowledge further, organize trainings of trainers for installing and maintaining green energy technologies, etc.
- Support through the Centers the establishment of at least 5 new SMEs (3 in Tajikistan and 2 in Kyrgyzstan) to work in the field of energy access in rural areas. The 5 SMEs will receive financial support of up to $300 to cover expenses related to official registration and other connected procedures. Priority will be given to women associations and cooperatives which have potential to become SMEs. A series of workshops (at least 3 in each country) will be organized in order to disseminate information on this support as well as to provide practical

[2] Pamir Energy Co. is an Independent Private Producer (IPP) and operates under the concessional agreement signed for 25 years. According to the agreement, Pamir Energy is allowed to increase tariffs periodically.

[3] An Energy Efficiency Center has already been set up in Dushanbe, in cooperation with Systemavtomatika, through the 2016 pilot project and will be further supported to develop its educational and informational services offering. A similar center will be established in Bishkek in cooperation with a local NGO.

hands-on trainings on how to install, handle and maintain renewable energy technologies. Part of the training will be dedicated to running an SME, developing business plans, etc.

- Provide trainings for 350 people in rural Tajikistan (at least 30% women) and 150 people in rural Kyrgyz Republic (at least 30% women) on construction, maintenance and installation of energy efficient cookstoves, solar thermal systems as well as other energy generating systems. Some of the trainings will be organized and provided by the Energy Access Centers.
- Provide trainings for 500 people (at least 30% women) in both on accessing and using innovative and affordable financial mechanisms that would allow them to purchase energy efficient equipment, including financial services offered by microcredit institutions, banks, crowdfunding platforms and others.

Component 2: Access to finance enabled and business models for green energy SMEs and energy service users piloted

In partnership with various local and international partners[4], the project will facilitate access to affordable finance by establishing a virtual **Energy Access Funding Platform (EAFP).** Its role will be to provide information on loans, microcredits and other innovative financing mechanisms (such as crowdfunding)[5] to energy access SMEs and their customers in partnership with national financial organizations such as banks and microcredit institutions.

Activity 2.1 Establish the Energy Access Funding Platform (EAPF) – the Platform will be an online depository of financial products, tools and services available for investments in green energy solutions as well as other offers such as cooperation with crowdfunding initiatives. The project will work with microcredit institutions, banks, crowdfunding platforms, etc. on expanding their offer and introducing new financial products (such as solar loans) to stimulate investments in green energy projects. All offers that will be available through the Funding Platform will promote women's access to these financial products. The funding that SMEs and private individuals will mobilize through these schemes will be matched with subsidies (up to 20% of investment costs) from the project. At the beginning, the Energy Access Funding Platform in both countries will be managed by Energy Access Centers and by the end of the project, UNDP will, with partners, select the most sustainable model for the platform operation.

Activity 2.2 Enable individual consumers to purchase their own energy access technology – for both countries, UNDP will play a brokering role in establishing partnerships and special cooperation with several crowdfunding platforms to create initiatives/products that could be promoted on platforms such as KIVA, Bettervest, TheSunExchange, Ifundwomen and Trine. This would enable direct peer-to-peer (P2P) lending through the platforms, which will enable lenders registered on these crowdfunding platforms (such as on KIVA) to provide their capital to project users. All the finance collected through the platforms will be linked with products that selected MFIs and local SMEs offer (such as Pamir Energy Company or Systemavtomatika) – and, therefore, enable lower interest rates through systematic work with loan takers. The goal is to use de-risking on both technical and economical sides in order to provide cheaper and better-quality energy access technologies to beneficiaries. Partnerships with crowdfunding platforms will be extensively promoted within MFIs, banks and SMEs as well as potential for final users.

Activity 2.3 Provide support to SMEs through the following actions:

- Develop and test innovative business models for SMEs and provide relevant training and coaching. Most of these SMEs would be already existing SMEs with proven work in the energy sector, or those established through the project with the support of the two Energy Access Centers. The business models to be tested and later scaled up could include the following options:

[4] E.g. "Village Organizations" - a network of over 1,200 independent Village Organisations (VO) set up by the Aga Khan Foundation in Pamir region; microcredit institutions such as "Sarvati Vakhsh", "Rushdi Vose" and "Imdodi Hutal"; crowdfunding platforms such as KIVA, Bettervest, TheSunExchange, Trine, etc.

[5] UNDP Alternative Finance Lab (www.AltFinLab.org) will support this project in the field of alternative finance. After successful application of reward based and donation based crowdfunding in both Tajikistan and Kyrgyz Republic, the project will falicitate the move to equity and lending based crowdfunding (which assumes a financial return for the backer/investor).

1) Renting model, whereby the clients rent an energy generating system and operation/maintenance risks are borne by the SMEs;

2) Pay-as-you-go model, whereby the SME retains ownership of the energy generating system until the user has completed payments over the lease period;[6]

3) Concession model, whereby one or more SMEs (energy service companies – ESCOs) are contracted on a fee-for-service basis by the Government to provide – for example – energy services to the public sector facilities, schools or hospitals;

4) Energy cooperatives approach – where local people are sharing the ownership of the total investment - covering at least 30-50% of the total costs, paid as a connection fee.

- After business models are developed and tested, scale them up and identify more advanced SMEs to become Renewable Energy Service Companies - RESCOs and capacitate them to invest in hybrid mini-grids on a village scale, or in energy access technology in public buildings in order to increase and improve access to modern, affordable and sustainable energy services.

Component 3: Access to sustainable energy services in remote rural areas provided

Through this component, the project will work on bringing energy access in rural areas at three different levels: i) household level, ii) public buildings level, and iii) village level. This will complement the work of first two components - implementing innovative and scalable business models developed and then providing direct financial incentives for SMEs in energy access products/service provision in rural areas.

Activity 3.1 Support green energy access in 5,000 households in both Tajikistan and the Kyrgyz Republic by providing support to procure small household technologies, that may include:

- Energy efficient cookstoves and heating stoves for cooking and spatial heating which ensure almost complete combustion. These appliances are highly energy efficient - in some cases higher than 90% even over 95% (rocket mass heater), compared to a regular cookstove used in Central Asia or East Europe that has an efficiency coefficient lower than 35% (open furnace), or even open fire (extreme low efficiency);
- Solar thermal - DIY standalone solar thermal systems built with locally available materials, which use the thermo syphon effect to heat water in a storage tank (40-60 liters);
- Small and medium PVs - a standalone photovoltaic system which charges itself by exposing to the sun, and takes form either as a small system (<50W) which can charge USB charging devices like a mobile phone; or as a medium sized system which converts electricity to 220V.

Activity 3.2 Support energy access in 20 public buildings in Tajikistan and Kyrgyzstan – the project will identify 20 public buildings in rural Tajikistan and Kyrgyzstan with a focus on schools, kindergartens, health posts and hospitals. This activity will include the development of technical documentation for installing renewable technologies. The technical solutions may include the installation of PV systems, energy refurbishment of buildings, biogas systems using agriculture waste for providing gas for cooking and heating, rocket stove mass heaters etc. The project will co-finance up to 20% of the total investment cost. A UNDP/GEF project will ensure 30% cofinancing in Tajikistan and the UNDP/Russia Trust Fund for Development project will provide a similar co-financing in the Kyrgyz Republic. The rest of the investment cost will come from buildings owners.

Activity 3.3 Support installation of 8 mini-grids in selected villages in Tajikistan[7] – Supporting SMEs/RESCOs in Tajikistan to establish hybrid mini-grids by connecting intermittent renewable energy sources to reliable and affordable electricity generating systems – and connecting both small businesses, public buildings and households. The technology that will be used for these hybrid mini-grids consists of micro/mini hydro power plants, biogas, solar power systems and gasoline/diesel generators as a back-up. The installed mini-grids will have a modular flexibility, to allow for additional

[6] this has been proven as the most successful model in developing countries, where mobile money is used to pay-of the system on a monthly basis

[7] Tentative locations for setting up mini-grids have been identified based on the availability of existing infrastructure and technical assessment/feasibility study. Those are: Asht district (Ashtsoy village), Kukhistoni Mastchoh district (Madrushkat village), Rasht district (Voydara village), Rudaki district (canal Nizhniy Koktash), Tursunzade district (headrace canal of pump station 3 Zarkamar), Roshorv (Bartang, Rushan), Vahdat district (Romit jamoat, Tavishi bolo), Vahdat district (Romit jamoat, Tavishi bolo), Safedob village (Shamsiddini Shohin district), Pinyon village (Ayni district), Pahtakor village (Dusti district), Khijborak village (Rasht district).

PVs or diesel generators to be installed with load increase. Hybrid mini-grids are designed to connect public buildings, households and commercial buildings to the grid. The project funding will be used catalytically, as the project will co-finance the total investment cost of the eight mini-grids with up to 20%. An additional 30% co-financing to the project budget is expected from a UNDP/GEF project, with some other additions from innovative financing mechanisms. The project will also fund the update of technical documentation in selected villages, if needed.

Expected Results

An overview of project results for energy access:

Energy Access Provided as:	**Household level** technologies for energy access (5,000 households)	Improving energy access to 20 **public buildings**	**Mini-grids** provided in 8 villages
Focus on:	Smaller technologies that are improving energy access to households and small businesses (solar thermal, PV systems, diesel generators, biogas, cookstoves, etc.)	Biogas (electricity and heat), PV systems, diesel generators, solar thermal systems, biomass heating	Small and mini hydro power plants, biogas, PV systems, diesel generators
Location:	40 villages (30 in Tajikistan, 10 in the Kyrgyz Republic)	15 public buildings in Tajikistan 5 public buildings in the Kyrgyz Republic	8 mini grids in Tajikistan

In addition to these results and as an important element of enabling final beneficiaries to access these technologies and applications, the project will provide training for 500 people (at least 150 women) on maintenance, installation and production of green energy equipment. Also, 500 people (at least 150 women) will be trained on accessing and using innovative and affordable financial mechanisms that would allow them to purchase energy efficient equipment. Additionally, at least the establishment of five new SMEs will be supported by the project.

Partnerships

The Ministry of Energy and Water Resources in Tajikistan and Ministry of Energy in the Kyrgyz Republic are crucial partners for supporting the green energy SMEs and setting up policy frameworks. A lot of activities connected with policy framework and scaling up private investments in small hydro power plants and micro grids will be achieved through the partnership with Pamir Energy Company, which is also important for delivering projects in Pamir region (GBAO).

With support from the UNDP Catalytic Facility in 2016, a special collaboration on promoting Renewable Energy Systems (RES) technologies in rural areas was established between the National Women Assembly of Kyrgyzstan, the RES Association and the Energy Efficiency Center. This partnership is used as a baseline for promoting RES technologies in rural areas of the Kyrgyz Republic. Similar partnerships are being established in Tajikistan (such as in Jilikul region with Women Association that is the main partner for educating women on solar production).

The Info-Educational Energy Access Centers in Dushanbe and Bishkek will be established within existing Energy Access Centers. Local partners for setting up these Centers and hosting them are Systemavtomatika (In Dushanbe) and a local NGO in Bishkek.

Crowdfunding and alternative finance technologies to scale up financing for green energy investments and bring remittances finance will be supported by UNDP Alternative Finance Lab (www.AltFinLab.org) which has the in-house expertise and already created partnerships with crowdfunding platforms and blockchain pioneers.

A partnership with the "Village Organizations", a network of over 1,200 independent Village Organizations (VO) dealing with institutional development at the community level, will be established in addition to partnerships with other NGOs such as "Women and Earth" ("Zan va Zamin") and others.

The UNDP/GEF project "Green Energy Small and Medium Enterprises (SMEs) Development Project" in Tajikistan will ensure necessary co-financing for the activities of the current project, both for policy improvements and equipment purchase and installation. This project objective is to facilitate the transformation of Tajikistan's energy sector, in particular the emergence of independent

energy entrepreneurs, which can offer affordable and sustainable energy products and services to rural population.

WeltHungerHilfe (German AgroAction) Tajikistan has been the recipient of OFID funds in 2015 and during the project, WHH could not identify professional RES suppliers in the country and had to create its own solutions. As a result of this project two structures emerged: a) Tajikstan's first hydropower turbine construction workshop and b) Green Technologies, a social enterprise focusing on green energy solutions. In the course of the project, these workshops supported under the OFID funding could be engaged in the manufacturing and construction of the small hydropower plants foreseen by the project.

The "Integrated Development in Osh Oblast, Kyrgyz Republic" project funded by the UNDP/Russia Trust Fund for Development will also be a significant parallel activity to this project. The main objective of the project is to assist the Kyrgyz Government to establish conditions to prevent violent conflicts and to secure sustainable human development in Osh Province through the implementation of inter-linked comprehensive measures aimed at significant reduction of poverty, improving welfare of target communities at risk and establishing more favorable conditions for sustainable development of human capital in three target districts of Osh Oblast. The programme will create various opportunities for the target population to reduce vulnerability on the short-term and long-term perspectives through various economic activities, improved access to water, environmental security, promotion energy efficiency and RES, generation of employment and rehabilitation of socio-economic infrastructure.

Another partnership will be established with communal enterprise "Bishketeploenergo" that received funding from the government to pilot installation of solar panels in the Kyrgyz Republic.

Resources Required to Achieve the Expected Results

UNDP`s Istanbul Regional Hub (IRH) in Turkey, as an advisory hub for the Europe and CIS region is tasked with the responsibility to provide policy and programmatic support to UNDP´s development activities in the region. Therefore, IRH Climate and Disaster Risk Reduction team for Europe and CIS is best placed to take the role of project coordinator ensuring the project will be well coordinated among two countries and that its regional dimension will add a significant value of knowledge and expertise sharing between the countries. Given the growing ambitions to expand the partnership with the donors, the IRH Partnerships team will ensure the coordinated communication with OFID.
In order to ensure country level implementation, under the guidance and direct supervision of the IRH CD team, two UNDP Country Offices (COs) in Tajikistan and Kyrgyz Republic will be in charge of implementing tasks and actions within their countries/territories.
Given the nature of the project, key resources required to achieve the project results include:

- payments to experts for supporting the project activities, support of technical and financial de-risking activities and policy and educational expertise;
- co-financing the costs of equipment through partnering with microcredit institutions and crowdfunding platforms;
- costs of setting up Info – Educational Energy Access Centers and educational support they are providing;

Additional co-financing for these activities will come from the UNDP/GEF project "Green Energy SMEs Development", the Ministry of Energy and Water Resources in Tajikistan, the Ministry of Energy in the Kyrgyz Republic, Pamir Energy Company, Systemavtomatika and CREEED NGO from Kyrgyz Republic. Also, the UNDP/Russia Trust Fund for Development funded project "Integrated Development in Osh Oblast, Kyrgyz Republic" will provide necessary co-financing for this project in the Kyrgyz Republic. Annex 4 provides details of parallel financing.

The UNDP Country Offices (COs) in Tajikistan and the Kyrgyz Republic are expected to provide working space for local consultants, and to support with the recruitment of local experts and consultants, and the coordination of stakeholder consultations and partners in beneficiary countries. COs will designate a responsible supervisor or contact person for the project. The implementation of the project will be guided by a multi-year workplan that will include the detailed budget of the project for the entire project duration.

Risks and Assumptions

Market Demand Risk - arises from low awareness, lack of reliable energy access technologies in rural areas and a nascent green energy access SME market. In order to address these risks, the project will provide support to green energy SMEs through education and support provided by the Info-Educational Energy Access Centers and will design affordable financing solution that will allow these SMEs and the affected communities to gain access to green energy (mini-grid or small-scale green energy household technologies).

Financial Sector Risk - stems from a lack of access to finance for green energy SMEs and for households willing to invest in their improved energy access. For setting up mini-grids and electrifying public buildings, the question of electricity tariffs is important to cover the actual costs. These risks will be addressed by the first component of the project (policy and regulatory frameworks); by the second component (setting up Energy Access Fund Platform) to support both providers – SMEs, and demand side (households, municipalities and SMEs) and by the third component of the project (co-financing energy access investments and technology acquisitions). Due to the lack of private power producing market in the Kyrgyz Republic, 75% of the project activities (and funding) will be allocated for Tajikistan.

Technology Risk - arises from the lack of experience with and know-how about green energy technologies in both countries. Local entrepreneurs, while being highly enthusiastic about market opportunities for green energy, lack essential knowledge and skills to manufacture, install and operate these technologies. Most of the existing small hydro power plants are built on a "do-it-yourself" basis, often using second hand equipment. Their operational performance is sub-optimal due to the absence of quality control and adequate operations and maintenance services. Solar technologies are even less advanced (hence even more risky and costly): there is only one company with some minimal manufacturing capacities in each country and there is an absolute absence of qualified technicians and installers. This risk will be addressed through support from Info-Educational Energy Access Centers; technical support in developing projects and in scaling up phase by focusing only on certified equipment to be used within the project.

Stakeholder Engagement

In the Kyrgyz Republic, the project will target households and villages in the Jalal-Abad Province (South region of the country), one of the poorest regions of the country with more than 45% of the population living in poverty. **In Tajikistan**, the focus is on rural households and villages in two regions: Gorno-Badakhshan Autonomous Region (GBAO) in the east of Tajikistan, located in the Pamir Mountains. These regions make up 45% of the land area of the country, but only 3% of the population, virtually all (86,5%) living in rural areas. GBAO region was among the most affected areas during and after the five-year civil war (1992-1997), struggling with harsh energy shortages during winter months, that result in the closure of schools, health centers and businesses. Another region in Tajikistan addressed by the project is the Khatlon Region - overwhelmingly rural (83%), with most of the population engaged in primary agriculture.

In both countries, the project will engage with both formal and informal groups and organizations, associations and cooperatives. Existing entrepreneurs and SMEs will also be involved in project activities.

The project will engage with women, women's cooperatives and organizations as means to gain insights into women's energy needs and use at the local level, but also to identify the agents of local change and take relevant project decisions (e.g. decide on the selection of public buildings).

However, as the work of creating enabling policy framework will contribute to national level legislation, ministries in charge of energy in both countries and other relevant government institutions will be engaged throughout the project activities.

Project Sustainability

Institutional Sustainability - The project approaches institutional sustainability through the angle of building capacities and enabling legislation that allows and encourages the private sector to invest in high-quality green energy home appliances for rural communities and in the production of green energy for the areas of Tajikistan that suffer from energy poverty. The activities of the first component of the project target this specific aspect of institutional suitability from the governmental perspective (creating legislation and corresponding capacities to institutionalizes incentives for green energy

producers) and from the private sector component – through the services that will be provided by the two Energy Access and Energy Efficiency Centres to SMEs and final clients/beneficiaries.
More specifically, on the governmental side the UNDP will be working with Ministries of Energy and other relevant governmental agencies (e.g. Ministry of Finance, Ministry of Industrial Development, etc) to put in place and implement enabling policies and regulations for green energy SMEs, such as:
a) revision and proposal of relevant by-laws based on Pamir Energy model to enable other companies/energy service providers (RESCO-type) to offer their services on the market basis in residential and public sector (hospitals, schools, etc);
b) provision of fiscal and other incentives for energy access SMEs, with a particular focus on women-led companies;
c) introducing streamlined procedures for green energy product certification and related quality and performance standards, etc.
Moreover, the two Energy Access and Energy Efficiency Centers will be set up and ran together with national counterparts (Systemavtomatika in Tajikistan and CREEED in the Kyrgyz Republic), who will take over the running of the centers after the closure of the project, offering the various trainings and support services (certification, showroom, etc) piloted with UNDP on a fee-for-service basis.
On the private sector component, the project aims to pilot services and technologies that will be acquired and produced in a sustainable manner, past the implementation of the project, by also creating a new, self-sufficient, functioning market for such good and services. As such, the project will provide support to private companies (for example by elaborating business models for companies producing green energy household technologies), while including a broad range of stakeholders – from Governmental partners to the final beneficiaries to ensure the uptake of the solutions proposed by the project.

Environmental Sustainability - The very purpose of the current project proposal is to promote scalable, private sector-led business models for the provision of reliable, affordable, and sustainable energy products and services for rural communities in Tajikistan and Kyrgyzstan which are currently confronted with a severe lack of access to energy and are therefore forced to adopt polluting, unsustainable methods to generate energy for domestic consumption. Traditional electricity is sourced from fossil fuels, or, where communities are not linked to the national power grids, from exploiting limited forests and biomass. During the last 20 years, it is estimated that, due to the winter energy crises 70% of forests have been depleted in Tajikistan which led to serious land erosion, and inability for sustainable agriculture.
Solar and hydro footprint per unit of energy production is 95% lower than that of fossil fuel power plants alone; and in combination with fossil fuels based generators for back-up are able to provide reliable energy access. In terms of carbon reduction, the impact of the proposed project can be assessed by estimating the volume of reduced CO2 and other harmful gasses (small particles, N0x, SO2) emissions, and also less wood needed from surrounding for biomass used for cooking and heating water.

Financial Sustainability - Although most of times mini-grids bear higher costs of electricity than regular tariffs, the UNDP experience in Tajikistan shows that an initial grant covering 30 to 50% of the investment cost can lower the final tariffs to the level of regular costs or even below.
At the country level, the WB report on Winter Energy Crisis in Tajikistan (2012), suggests that residential consumers are willing to pay up to 4.6 cents per kWh consumed. Considering that the prices for electricity from the small hydropower plants constructed by the UNDP projects are well below the suggested thresholds of 4.6 cents per KWh, the power produced by the mini-grids to be funded through this proposal will be affordable for the final beneficiaries. The introduction of a clear and easy-to-use payment mechanisms and a robust management system at each of the proposed mini-grids (introducing metering, penalty for not paying and/or reward mechanisms), will further stimulate the willingness to pay by the final consumers.

The project will communicate its results through the UNDP managed website for this initiative which has been launched in a pilot stage (www.GreenVillagesCentralAsia.org), where the progress will be perpetually communicated and monitored through all the project sites, used technologies, financial support, external partners as well as tracking activities.

South-South and Triangular Cooperation (SSC/TrC)

Wherever applicable, the project will promote joint learning between project partners and beneficiaries in Tajikistan and Kyrgyzstan. For example, the resources, materials, and best practices developed by the two Energy Access Centers in Bishkek and Dushanbe will be shared through the project. Also, Tajikistan's experience in stimulating the involvement of private companies in the green/renewable energy sector will be shared with the Kyrgyz Republic as an entry point for a wide stakeholders conversation on possible reforms within the energy sector.

IV. PROJECT MANAGEMENT

Project Management

The project will be managed by the UNDP Istanbul Regional Hub (IRH) within the UNDP Direct Implementation Modality (DIM). The Climate and Disaster Team will provide oversight, quality assurance, technical guidance and project management. The IRH Partnerships Team will ensure the communication with the donor. National-level activities will be implemented directly through the UNDP Country Offices in beneficiary countries with dedicated outputs to each Country Office that will be responsible for achieving their targets. Project management will be carried out by existing staff of UNDP IRH and respective UNDP Country Offices (through UNDP DPC arrangement), where both COs will appoint responsible Programme Officer tasked for project implementation. A part-time expert on rural energy and innovative business models will be recruited to provide technical guidance for the implementation of the project.

At the regional level, UNDP Istanbul Regional Hub (IRH) as the Implementing Partner will have direct communication with UNDP COs in order to ensure adequate and prompt information exchange so that the regional component of the project is well structured. Regular online discussions involving IRH and UNDP COs will also be conducted to ensure proper coordination. UNDP COs within the two countries will be responsible for maintaining a close communication with the respective national and local partners.

A Project Board will be established within the IRH to provide guidance and supervision for the project implementation and to ensure adequate engagement with the project donor (OFID).

All materials and publications produced under the project materials will fully adhere to the Communication and Visibility Strategy of the UNDP and the donor (OFID).

This project builds upon and complements previous UNDP work on Green Villages Initiative in Central Asia and all previously established local-level contacts and communication channels will be used. Also, the project will also take into consideration the existing climate and energy portfolio of UNDP, state level institutions and all other stakeholders to ensure complementarity and continuity and at the same time avoiding overlapping.

Cost efficiency of the project is primarily visible in the fact that the same innovative financing models will be replicated/adapted in two countries within the same project. Moreover, UNDP presence in each of those countries is important as travel costs for project management team at the regional level would be significantly lower. Furthermore, travel and accommodation costs would be reduced in a way that workshops and trainings would be organized back-to-back i.e. they will follow each other.

V. RESULTS FRAMEWORK

Intended Outcome as stated in Regional] Programme Results and Resource Framework: Regional plan outcome 1. Accelerating structural transformations through more effective governance systems								
Outcome indicators as stated in the Regional] Results and Resources Framework, including baseline and targets: 2.11 Proportion of population with primary reliance on clean fuels and technology								
Applicable Output(s) from the UNDP Strategic Plan: 2.5.1 Solutions developed, financed and applied at scale for energy efficiency and transformation to clean energy and zero-carbon development, for poverty eradication and structural transformation								
Project title and Atlas Project Number: Energy Access SMEs Development Project								
EXPECTED OUTPUTS	**OUTPUT INDICATORS[8]**	**DATA SOURCE**	**BASELINE**		**TARGETS (by frequency of data collection)**			**DATA COLLECTION METHODS & RISKS**
			Value	**Year**	**Dec 2018**	**Dec 2019**	**June 2020**	**FINAL**	
Output 1 Enabled policy framework and capacity development for green energy	*1.1 Policy recommendations for private investments in providing green energy through SMEs developed and presented with national stakeholders in both countries*	*Project report, UNDP COs reports*	0	2017	*1*	2	3	*3*	*Policy briefs including recommendations presented to stakeholders; political risk in accepting them partially*
	1.2 # of people (disaggregated by sex and age) trained through the Energy Access Centers on construction, maintenance and installation of their own energy efficient cook stoves, solar thermal systems and other energy generating systems	*Project report, Energy Access Centers*	*0*	*2017*	*200*	*400*	*500*	*500*	*List of project trainees & training certificates*
	1.3 # of women and men led SMEs established with support by Energy Access Centers	*Project report, Energy Access Centers*	*0*	*2017*	*2*	*4*	*5*	*5*	*List of new SMEs established and supported; along with copy of their certificate awarded by the Energy Access Centers*
Output 2 Access to finance enabled and business models for green energy	*2.1 # microcredit institutions and banks joining the Energy Access Fund;*	*UNDP COs reports*	*0*	*2017*	*4*	*7*	*8*	*8*	*Copies of contracts between UNDP and microcredit institutions/banks providing green loans and distributing grants;*

SMEs and energy service users piloted	*2.2.1 # of tailor made crowdfunding products designed with crowdfunding platforms and operational;*	*UNDP COs*	*0*	*2017*	*1*	*2*	*4*	*4*	*Copies of contracts for crowdfunded projects with partnering platforms*
	2.2.2 # of financial incentives ensuring women's access to finance	*UNDP COs*	*0*	*2017*	*1*	*2*	*3*	*3*	*Microcredit guidelines and criteria*
	2.3 # of business models piloted with established SME	*UNDP COs*	*0*	*2017*	*2*	*3*	*4*	*4*	*Copies of guidelines for business models*
Output 3 Access to sustainable energy services in remote rural areas provided	*3.1 # of minigrids implemented on a village level in Tajikistan*	*UNDP Tajikistan*	*0*	*2017*	*2*	*5*	*8*	8	*Complete project documentation from implemented and installed minigrids*
	3.2 # of public buildings in villages with operational and sustainable PV and heating energy systems	*UNDP COs*	*0*	*2017*	*4*	*12*	*20*	*20*	*Complete project documentation from installed systems in public buildings* *User satisfaction survey*
	3.3 # of households supported with green energy access through operational and sustainable small scale technologies with ensured project co-financing	*UNDP COs*	*0*	*2017*	*800*	*3000*	*5000*	*5000*	*List of people who purchased cofinanced green energy access technologies though the project* *User satisfaction survey*

[8] It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans:

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Progress data against the results indicators in the RRF will be collected and analyzed to assess the progress of the project in achieving the agreed outputs.	At least quarterly	Slower than expected progress will be addressed by project management.	IRH, UNDP CO	IRH and CO staff cost $1,000
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.	IRH, UNDP CO	IRH and CO staff cost $1,000
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.	IRH, UNDP CO	IRH and CO staff cost
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.	IRH	IRH staff cost $500
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.	IRH, UNDP CO	IRH and CO staff cost

Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)		IRH, UNDP CO	IRH and CO staff cost $1,500
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	At least annually	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.	IRH, UNDP CO	IRH and CO staff cost $1,000

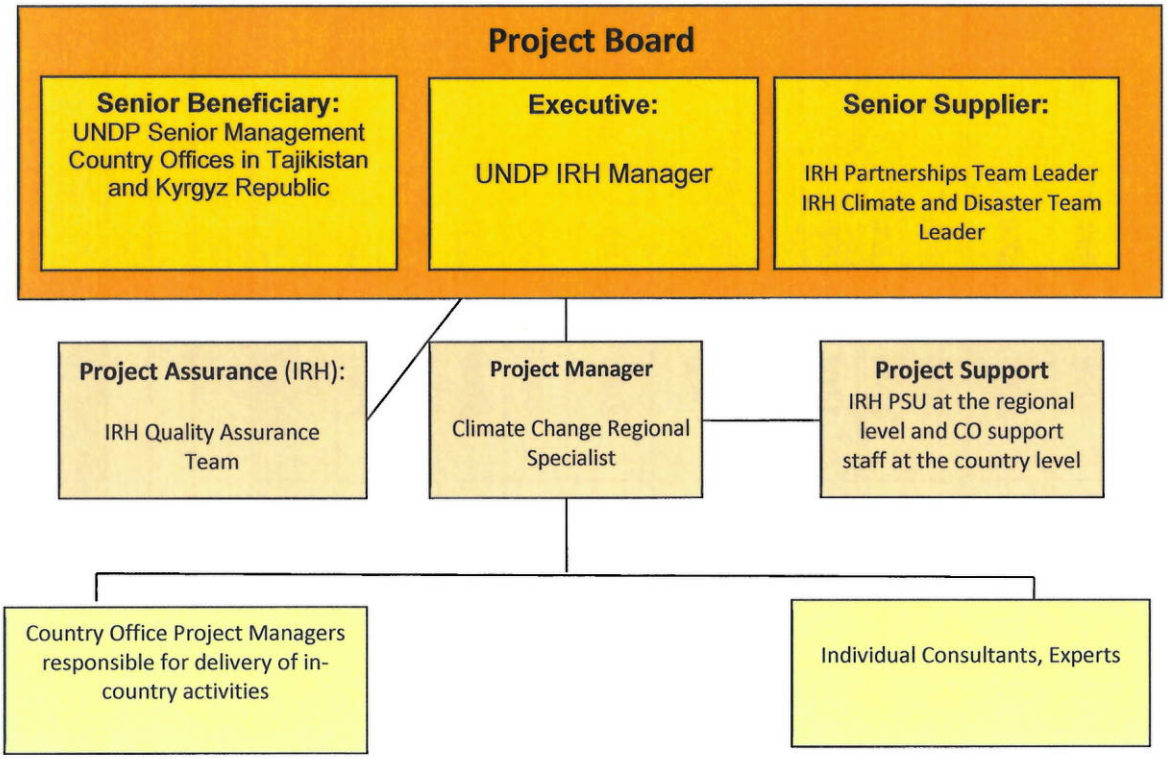
VII. MULTI-YEAR WORK PLAN

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year			RESPONSIBLE PARTY	PLANNED BUDGET					
		2018	2019	2020		Funding Source	Budget Description	Amount ($) 2018	Amount ($) 2019	Amount ($) 2020	Amount ($) Total
Output 1 Istanbul Regional Hub	Component 1: Enabling policy framework for capacity development for green energy	37,000	37,000	18,000	UNDP IRH	OFID	71200 International consultants	25,000	25,000	12,500	62,500
	Component 2: Access to finance enabled and business models for green energy SMEs and energy service users piloted						71600 Travel	10,000	10,000	4,000	24,000
	Component 3: Access to sustainable energy services in remote rural areas provided						74500 Miscellaneous expenses	1,000	1,000	1,000	3,000
	Monitoring							1,000	1,000	500	2,500
	Subtotal for Output 1							**37,000**	**37,000**	**18,000**	**92,000**
Output 2 Tajikistan	Component 1: Enabling policy framework for capacity development for green energy	18,000	17,500	5,500	UNDP CO	OFID	72100 International consultants	2,000	2,000	1,000	5,000
							71300 Local consultants	2,000	2,000	1,000	5,000
							71600 Travel	2,000	2,000	500	4,500
							72100 Companies	7,000	7,000	3,000	17,000

							75700 Workshops	5,000	4,500	0	9,500
	Component 2: Access to finance enabled and business models for green energy SMEs and energy service users piloted	22,500	22,000	8,500	UNDP CO	OFID	72100 International consultants	5,000	5,000	2,000	12,000
							71300 Local consultants	7,000	7,000	3,500	17,500
							71600 Travel	5,000	5,000	2,000	12,000
							72100 Companies	3,000	3,000	0	6,000
							72800 IT equipment	1,000	1,000	0	2,000
							74200 Audio Visual Print	1,000	500	500	2,000
							74500 Miscellaneous expenses	500	500	500	1,500
	Component 3: Access to sustainable energy services in remote rural areas provided	176,000	170,000	30,000	UNDP CO	OFID	72100 International consultants	7,000	5,000	3,000	15,000
							71300 Local consultants	7,000	8,000	3,000	18,000
							71600 Travel	5,000	5,000	3,000	13,000
							72100 Companies	150,000	140,000	15,000	305,000
							72600 Grants	5,000	10,000	5,000	20,000
							74200 Audio Visual Print	1,000	1,000	0	2,000
							74500 Miscellaneous expenses	500	500	500	1,500
	Monitoring							500	500	500	1,500
	Subtotal for Output 2							**216,500**	**209,500**	**44,000**	**470,000**
Output 3 Kyrgyzstan	Component 1: Enabling policy framework for capacity development	13,500	11,500	500	UNDP CO	OFID	72100 International consultants	2,000	2,000	0	4,000
							71300 Local consultants	2,000	2,000	500	4,500
							71600 Travel	1,500	1,500	0	3,000

	for green energy						72600 Grants	5,000	3,000	0	8,000
							72800 IT equipment	1,000	1,000	0	2,000
							75700 Workshops	2,000	2,000	0	4,000
	Component 2: Access to finance enabled and business models for green energy SMEs and energy service users piloted	10,500	10,500	2,500	UNDP CO	OFID	72100 International consultants	3,000	3,000	0	6,000
							71300 Local consultants	2,500	2,500	500	5,500
							71600 Travel	2,500	2,500	1,000	6,000
							72800 IT equipment	1,000	1,000	0	2,000
							74200 Audio Visual Print	1,000	1,000	500	2,500
							74500 Miscellaneous expenses	500	500	500	1,500
	Component 3: Access to sustainable energy services in remote rural areas provided	56,500	52,300	11,200	UNDP CO	OFID	72100 International consultants	3,000	3,000	1,000	7,000
							71300 Local consultants	3,000	2,000	1,000	6,000
							71600 Travel	3,000	2,000	1,000	6,000
							72100 Companies	40,000	40,000	6,000	86,000
							72600 Grants	7,000	5,000	2,000	14,000
	Monitoring							500	300	200	1,000
	Subtotal for Output 3							**80,500**	**74,300**	**14,200**	**169,000**
	Total Outputs 1-3										**731,000**
GMS 8%											**58,480**
DPC											**10,520**
Total											**800,000**

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS



IX. LEGAL CONTEXT

This project forms part of an overall programmatic framework under which several separate associated country level activities will be implemented. When assistance and support services are provided from this Project to the associated country level activities, this document shall be the "Project Document" instrument referred to in: (i) the respective signed SBAAs for the specific countries; or (ii) in the Supplemental Provisions to the Project Document attached to the Project Document in cases where the recipient country has not signed an SBAA with UNDP, attached hereto and forming an integral part hereof. All references in the SBAA to "Executing Agency" shall be deemed to refer to "Implementing Partner."

This project will be implemented by UNDP ("Implementing Partner") in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

X. RISK MANAGEMENT

1. UNDP as the Implementing Partner will comply with the policies, procedures and practices of the United Nations Security Management System (UNSMS.)

2. UNDP as the Implementing Partner will undertake all reasonable efforts to ensure that none of the [project funds][9] [UNDP funds received pursuant to the Project Document][10] are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

3. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (http://www.undp.org/ses) and related Accountability Mechanism (http://www.undp.org/secu-srm).

4. UNDP as the Implementing Partner will: (a) conduct project and programme-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.

5. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any programme or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.

6. UNDP as the Implementing Partner will ensure that the following obligations are binding on each responsible party, subcontractor and sub-recipient:

    a. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of each responsible party, subcontractor and sub-recipient and its personnel and property, and of UNDP's property in such responsible party's, subcontractor's and sub-recipient's custody, rests with such responsible party, subcontractor and sub-recipient. To this end, each responsible party, subcontractor and sub-recipient shall:
        i. put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
        ii. assume all risks and liabilities related to such responsible party's, subcontractor's and sub-recipient's security, and the full implementation of the security plan.

    b. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the responsible party's, subcontractor's and sub-recipient's obligations under this Project Document.

    c. Each responsible party, subcontractor and sub-recipient will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, subcontractors and sub-recipients in implementing the project or programme or using the UNDP funds. It will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.

    d. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to each responsible party, subcontractor and sub-recipient: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. Each responsible party, subcontractor and sub-recipient agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

    e. In the event that an investigation is required, UNDP will conduct investigations relating to any aspect of UNDP programmes and projects. Each responsible party, subcontractor and sub-recipient will provide its full cooperation, including making available personnel, relevant documentation, and granting access to its (and its consultants', subcontractors' and sub-

[9] To be used where UNDP is the Implementing Partner

[10] To be used where the UN, a UN fund/programme or a specialized agency is the Implementing Partner

recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with it to find a solution.

f. Each responsible party, subcontractor and sub-recipient will promptly inform UNDP as the Implementing Partner in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where it becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, each responsible party, subcontractor and sub-recipient will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). It will provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

g. *Choose one of the three following options:*

Option 1: UNDP will be entitled to a refund from the responsible party, subcontractor or sub-recipient of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of this Project Document. Such amount may be deducted by UNDP from any payment due to the responsible party, subcontractor or sub-recipient under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail any responsible party's, subcontractor's or sub-recipient's obligations under this Project Document.

Where such funds have not been refunded to UNDP, the responsible party, subcontractor or sub-recipient agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to such responsible party, subcontractor or sub-recipient for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

h. Each contract issued by the responsible party, subcontractor or sub-recipient in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from it shall cooperate with any and all investigations and post-payment audits.

i. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project or programme, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.

j. Each responsible party, subcontractor and sub-recipient shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to its subcontractors and sub-recipients and that all the clauses under this section entitled "Risk Management Standard Clauses" are adequately reflected, *mutatis mutandis*, in all its sub-contracts or sub-agreements entered into further to this Project Document.

XI. ANNEXES

1. **Project Quality Assurance Report** (added as a separate file)

2. **Social and Environmental Screening Template**

Project Information

Project Information	
1. Project Title	Energy Access SMEs Development Project
2. Project Number	00106776
3. Location (Global/Region/Country)	Tajikistan and the Kyrgyz Republic

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?
Briefly describe in the space below how the Project mainstreams the human-rights based approach
The project has been informed by the recommendations of international human rights bodies, particularly with regards to the rights of women. Project monitoring will examine project processes and outcomes with a view to human rights standards and principles. The project directly contributes to the right to work ICESCR Art 6.2, the right to work shall include technical and vocational guidance and training programmes to achieve steady economic, social and cultural development and full and productive employment; ICESCR Art 11, the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions; as well as the elimination of discrimination against women UN CEDA Art 14. The overall aim of the project is to support more decent jobs for population in rural areas. Interventions target increasing productivity and right to access energy.
Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment
The project has an overall target of 30% female participation across its activities
Briefly describe in the space below how the Project mainstreams environmental sustainability

Among its activities, the project will develop and introduce procedures for green energy product certification and related quality and performance standards (e.g. develop by-laws, manuals and guidelines to set up national minimal standards for green energy technologies), Those standards will be compliant with internationally recognized environmental standards and norms.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Attachment 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low Risk Projects.*	**QUESTION 3: What is the level of significance of the potential social and environmental risks?** *Note: Respond to Questions 4 and 5 below before proceeding to Question 6*			**QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?**
Risk Description	***Impact and Probability (1-5)***	***Significance (Low, Moderate, High)***	***Comments***	***Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.***
N/A -- see checklist				

QUESTION 4: What is the overall Project risk categorization?		
Select one (see SESP for guidance)		**Comments**
Low Risk	X	
Moderate Risk	☐	

	High Risk	☐	
	QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?		
	Check all that apply		**Comments**
	Principle 1: Human Rights	☐	
	Principle 2: Gender Equality and Women's Empowerment	☐	
	1. Biodiversity Conservation and Natural Resource Management	☐	
	2. Climate Change Mitigation and Adaptation	☐	
	3. Community Health, Safety and Working Conditions	☐	
	4. Cultural Heritage	☐	
	5. Displacement and Resettlement	☐	
	6. Indigenous Peoples	☐	
	7. Pollution Prevention and Resource Efficiency	☐	

Final Sign Off

Signature	***Date***	***Description***
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental Risks		
Principles 1: Human Rights		**Answer (Yes/No)**
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? [11]	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project affected communities and individuals?	No
Principle 2: Gender Equality and Women's Empowerment		
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? *For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being*	No
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?	No
	For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes	

[11] Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	No
1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? *For example, construction of dams, reservoirs, river basin developments, groundwater extraction*	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? *For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.*	No
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant[12] greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	No
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)? *For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding*	No
Standard 3: Community Health, Safety and Working Conditions		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No

[12] In regards to CO_2, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labor standards (i.e. principles and standards of ILO fundamental conventions)?	No
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Standard 4: Cultural Heritage		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions?[13]	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? *If the answer to the screening question 6.3 is "yes" the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.*	No
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No

[13] Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or nonroutine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No
7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and nonhazardous)?	No
7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs? *For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol*	No
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

3. Risk Analysis

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Management response	Owner	Submitted, updated by	Last Update	Status
1	Widespread poverty and lack of sustainable source of income resulting in low ability to pay for energy access technologies and services	October 2017	Market	P =3 I = 3	UNDP will be working on de-risking investments and thus making them cheaper to the final beneficiaries. Components 2 and 3 of the project are designed to address or at least partially mitigate this risk, via engagement with micro-finance sector for provision of green energy loans, as well as by piloting business models with SMEs avoid the need of high-upfront payment for RES solutions by the rural customers.	UNDP IRH, UNDP COs	UNDP COs		
2	Insufficient quality of locally produced equipment leading to early break-down of installed technologies (hydro, PV, solar thermal, energy efficient cookstoves...) and declining consumer confidence in the technology	October 2017	Technology	P = 2 I = 4	Components 1 and 2 of the project will be addressing the technology/capacity risks. Also, partnerships with experienced companies will ensure valid technology transfer and providing only quality equipment	UNDP COs	UNDP COs		
3	Lack of political support may jeopardize the achievement of immediate results and overall impact	October 2017	Political	P = 2 I = 5	The project will work closely with key Ministries and Governmental agencies dealing with investment promotion to design a comprehensive policy package,	UNDP IRH, UNDP COs	UNDP IRH, UNDP COs		

					secure their buying and support at highest political level.				
4	Lack of interest from communities to support and participate in the project	October 2017	Social	P = 2 I = 3	The project will work closely with several grassroot organizations and civil society partners, including women organizations, village organizations and specifically with villages that already expressed the willingness to invest in energy access, to address social/cultural risks and misperceptions about green energy technologies at the local level)	UNDP COs	UNDP COs		

4. Project parallel funding

Country	Components	UNDP CO	Ministry of Energy Kyrgyz Republic	Ministry of Energy & Water Resources Tajikistan	Pamir Energy	CREEED Bishkek	Total
Tajikistan	1. Enabling policy framework for capacity development for green energy	$180,000		$50,000			$1,096,000
	2. Facilitate access to affordable finance	$220,000					
	3. Access to sustainable energy services in remote rural areas	$266,000		$30,000	$350,000		
Kyrgyz Republic	1. Enabling policy framework for capacity development for green energy	$120,000	$70,000			$10,000	$510,000
	2. Facilitate access to affordable finance	$94,000				$16,000	
	3. Access to sustainable energy services in remote rural areas	$170,000	$30,000				
TOTAL							$1,606,000