READINESS & **PREPARATORY SUPPORT**



PROPOSAL TEMPLATE

Proposal title: Technical Guidance and Support to Conduct a Sectoral

Technology Needs Assessment and a Technology Action Plan

for The Kyrgyz Republic

Country: The Kyrgyz Republic

Sanjar Mukanbetov

Minister

Ministry of Economy

National Designated Authority: And

Kanat Abdrahmanov

Director of Climate Finance Center

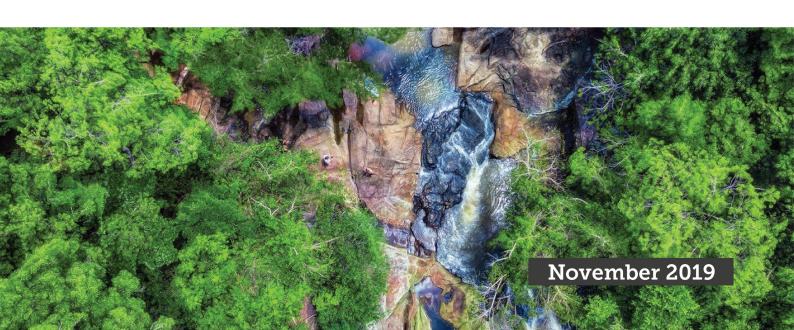
United Nations Environment Programme (UNEP) on behalf of the Implementing Institution:

Climate Technology Centre and Network (CTCN)

15 September 2020 Date of first submission:

Date of current submission / version number

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Note: Environmental and Social Safeguards and Gender

Throughout this document, when answering questions and providing details, please make sure to pay special attention to environmental, social and gender issues, particularly to the situation of vulnerable populations, including women and men. Please be specific about proposed actions to address these issues. Consult Annex IV of the Readiness Guidebook for more information.

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PROPOSAL TEMPLATE



1. SUMMARY The Kyrgyz Republic Country name: 1.1 Country submitting the proposal Name of institution representing Ministry of Economy NDA or Focal Point: Sanjar Mukanbetov Name of contact person: Minister Contact person's position: +996 312 620590 Telephone number: M.SANJAR72@MAIL.RU Email: 106, Chui Avenue, Bishkek, Kyrgyzstan Full office address: Additional email addresses that Kanat Abdrahmanov need to be copied on **Director of Climate Finance Center** correspondences: ABDRAHMANOV@CFC.KG 1.2 Date of initial 15 September 2020 submission 1.3 Last date of 15 September 2020 Version number V.2 resubmission ☐ National Designated Authority 1.4 Which institution will implement the □ Accredited Entity Readiness and □ Delivery Partner **Preparatory Support** Please provide contact information if the implementing partner is not the project? NDA/focal point Name of institution: UNEP on behalf of the CTCN Name of official: Kelly West Position: GCF AE Focal Point

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1.5 Title of the Readiness support proposal

Technical guidance and support to conduct a Sectoral Technology Needs Assessment (TNA) and prepare a Technology Action Plan (TAP) for the Kyrgyz Republic

1.6 Type of Readiness support sought

Please select the relevant GCF Readiness objective(s) below (click on the box – please refer to Annex I and II in the Guidebook):

- ☑ II. Strategic frameworks
- ☐ III. Adaptation planning
- ☑ IV. Pipeline development
- ☐ V. Knowledge sharing and learning

1.7 Brief summary of the request

This Readiness support proposal seeks assistance to **establish a climate technology framework in the country to help it achieve a steady climate resilient socio-economic development.** This will be done through developing a comprehensive Sectoral TNA and TAP for the Kyrgyz Republic. This work will support the country in achieving its international climate targets as stated in the country's Nationally Determined Contribution (NDC), the Third National Communication and the Green Climate Fund (GCF) Country Programme by utilizing and disseminating most appropriate climate technology solutions.

This work is required because the country's key economic sectors – namely, agriculture, energy, water and solid waste management – cannot meet the country's socio-economic development and climate resilience objectives due to being

dependent on outdated technologies. A number of barriers prevent the country from utilizing modern technologies in these sectors:

- A comprehensive system to develop and implement a sectoral TNA is lacking among concerned country's stakeholders. There is no formal coordination mechanism to oversee and structure these efforts.
- The country lacks a strategic framework to improve sectoral expertise in climate technologies. It needs to identify and prioritise most appropriate technologies for different sectors of the economy but does not have a methodology to do so and has no action plan to deploy climate technologies on the ground.
- No robust climate sensitive technology project proposals are being formulated in the country, which leaves the country lacking funding inflows into its climate technology projects and further delays climate technology deployment.

At present, the Kyrgyz Republic has a number of country programmes and national strategies to achieve its international climate targets in place. However, major sectoral, policy, institutional, financial and capacity challenges prevent the country from strengthening its climate change preparedness. In this context, the Sectoral TNA will develop an effective mechanism coordination and implementation mechanism between key national stakeholders so that the objective of this Readiness support proposal can be achieved in an inclusive and country driven manner (Output 1.3.1) and strengthen capacity of the private sector stakeholders to deploy climate technologies (Output 1.3.2).

Preliminary work to prepare the Readiness support proposal identified and thoroughly assessed four priority economic sectors: agriculture, energy, water and solid waste management. Adaptation and mitigation technologies in these sectors will be integral to delivering on the Kyrgyz Republic's international climate targets. The Sectoral TNA process will hence identify key sub-sectors and priority technologies to be introduced and deployed in these sub-sectors. The process will demonstrate benefits and costs of these technologies within the national context. The TAP will focus on their accelerated development and transfer.

This Readiness support proposal will complement planned and ongoing initiatives GCF supported initiatives. Activities will include identifying development needs already formulated in national development strategies and on assessing national policies, existing sectoral plans and strengths in the context of the country's

economic, social and environmental development priorities. Such synergies with on-going climate work and economies of scale will be achieved through a robust stakeholder engagement process, sharing of resources and inputs into communication strategies, trainings and round table dialogues, utilizing existing tools such as GCF monitoring tools, and increasing the engagement of the private sector. A dedicated training will be delivered to the private sector representatives with the objective of facilitating a climate responsive technology market formation in the Kyrgyz Republic.

The anticipated output is a Sectoral TNA report (Output 2.2.10 and a TAP (Output 2.2.2) that present a number of strategic, long-term, participatory transformational measures across four identified and prioritized sectors (agriculture, energy, water and solid waste management) to drive climate resilient and low carbon growth in the Kyrgyz Republic. High-level political support is critical to the success of the TNA work, and hence full support of the National Designated Authority (NDA) and the Nationally Designated Entity (NDE) to the CTCN has been obtained during this Readiness support proposal preparation process. The NDEs are national technology focal points appointed by the countries to the United Nations Framework Convention on Climate Change (UNFCCC) Technology Mechanism, with a mandate to mainstream technology transfer in the respective countries. In case of Kyrgyzstan the Climate Finance Centre (CFC) is the NDE.

Finally, this Readiness support proposal will enable the development of scalable bankable projects that target prioritised sectors and deliver quantifiable emissions reductions as well as quantifiable climate adaptation benefits through the development of concept notes (CN) to the GCF (Output 4.1.1).

1.8 Total requested amount and currency

USD 490 181,00

1.9 Implementation period

18 months

1.10 Is this request a multiple-year strategic Readiness implementation request?

□ Yes

⊠ No

For more information on how a country may be eligible to access Readiness support through this modality, please refer to **Annex IV** of the Readiness Guidebook.

1.11 Complementarity and coherence of existing readiness support

□ No

In 2016, with the support of the Food and Agriculture Organization (FAO), the country submitted its first Readiness and Preparatory Support request to Support the Kyrgyz Republic in its Efforts to Strengthen its Capacities and Develop a Strategic Framework for Engagement with the GCF. This GCF grant was of \$300,000. The implementation was successfully completed in the first quarter of 2020. Under this GCF grant, a template to collect project/programme ideas was developed and several national/sub-national consultations were organized to discuss the priorities identified by the government. As a result of conducted consultations, a very initial list of measures proposed by stakeholders was put together. Due to the changes in the institutional set-up for climate action, the list is being reviewed by the new NDA and FAO to finalize the pipeline of projects in the coming months. This support is being coordinated with Eco. Ltd, a consulting firm directly hired by the GCF. Both partners and the NDA have discussed expected outcomes. On this basis, FAO prepared a draft GCF Country Programme, which the CFC is to finalize after incorporating outcomes of all all stakeholder consultations. The list of project ideas will be finalized and used to develop bankable projects under outcome 4 of this Readiness support proposal.

In addition, with the support of the United Nations Development Programme (UNDP), the country submitted its second Readiness and Preparatory Support request to develop a National Adaptation Plan (NAP), which was approved in June 2020 with a grant amount of US\$ 2,6 million. Under the readiness support, along with the development of the NAP, four adaptation plans for priority sectors (disaster and emergency management, health, biodiversity conservation, agriculture and irrigation water) as well as adaptation plans for two sub-regions of the country will be developed. The outcomes of this support will also

include strengthened coordination and institutional arrangements for national, sub-national and sector-focused adaptation planning process. The proposed TNA will identify specific technologies as well as implementation and scale up barriers in the two sectors, namely agriculture and water, which are priority sectors both for the NAP and for the proposed TNA work. Since the activities under the TNA (if approved) and the NAP would be conducted in parallel, it is proposed that the Sectoral TNA Committee established as in activity 1.3.1 has a representative of UNDP in charge of implementing the NAP proposal. This Readiness support proposal aims to develop the country's sectoral TNA and its Action plan, and will build on the previous country Readiness support proposals to the GCF as well as stakeholders' networks and consultations mechanisms. In doing so, the Readiness support proposal will ensure a sustained readiness dialogue process on climate finance bolstering collaboration with agencies, and garnering useful lessons and experiences learnt.

Furthermore, the Sectoral TNA will build upon lessons learnt from other development programmes implemented in the country. These are further described in Section 2.

2. SITUATION ANALYSIS

1. The Kyrgyz Republic is highly vulnerable to climate change

The Kyrgyz Republic contributes 0.034% of world total greenhouse gas (GHG) emissions (USAID, 2015) and accounts for less than 1/3rd of the world average per capita GHG emissions (INDC, 2015). While the country is committed to decoupling its economic development from its carbon emissions, its major policy effort so far has largely focused on adaptation measures. the Kyrgyz Republic is indeed the third most vulnerable country to climate change impacts in Eastern Europe and Central Asia (UNDP, 2013). According to UNDP estimates, if disaster damage increases at the rate of the annual population growth (1.1% per year), a conservative assumption is that climate-related disasters could total USD 156 million by 2032 (UNDP, 2013). Climate projections anticipate a significant annual average temperature increase in the country: nearly 2°C by 2060 and in the range of 2.0°C to 5.5°C by 2085 (USAID, 2017). This scenario will most likely intensify land degradation, expand desertification areas (USAID, 2017) and, in the long run, heavily affect the agriculture and water availability in the country. According to the FAO, most rivers in the Kyrgyz Republic are fed by glaciers and/ or snow melt. Peak flows occur from April to July, with 80 to 90% of them taking place in a span of 120-180 days extending into August or September. The temperature increase makes glaciers melt faster, which is likely to lead to an increased water supply till 2025, followed by a sharp reduction (about 20%) in water availability by 2050 (USAID, 2017). Finally, hydropower plants (HPP) cover 90% of the national electricity generation, which makes the sector heavily dependent on water availability (Third National Communication, 2016).

As of 2018, **22.4%** of the population lives below the national poverty line (ADB, 2020) and a socially inclusive economic growth is hence is major priority for the Kyrgyz Republic, as stated in the <u>National Development Strategy of the Kyrgyz Republic 2018-2040</u> and the <u>Green Economy Development Programme for 2019-2023</u>. The country urgently needs to integrate climate change preparedness across its key economic sectors to attain this priority.

2. A number of significant steps have already been undertaken to reduce this vulnerability

The Kyrgyz Republic is well aware of its climate challenges and actively takes part to major international climate change commitments and mechanisms. It joined the UNFCCC as a non-Annex I Party on 13 May 2003. Since then, the country prepared three National Communications and the fourth National Communication is currently in the drafting process. The Third National Communication was issued in 2016. It provides a detailed inventory of GHG emissions and lists adaptation and mitigation requirements of the country. In 2015, the Kyrgyz Republic issued the Intended Nationally Determined Contribution (INDC), in which it targets to reduce GHG emissions in the range of 11.49 - 13.75% below the business as usual scenario (BAU) in 2030 without the international support and in the range of 29.00 - 30.89% below BAU in 2030 with the international support to

implement mitigation measures. The INDC also highlights the importance of climate change adaptation measures to avoid significant economic losses. On 18 February 2020, the Kyrgyz Republic ratified the Paris Agreement and the INDC automatically became an NDC.

Several strategic documents clarify how the international climate commitments will be implemented at the national level. The vision of the National Development Strategy of the Kyrgyz Republic 2018-2040 is to become a self-sufficient developed state. To achieve this vision in a sustainable manner, the country developed the Green Economy Development Programme for 2019-2023, aimed at meeting the requirements of the Paris Agreement. This detailed document assesses key climate vulnerabilities in all economic sectors of the country, lists interventions to be undertaken and names institutions in charge. The Programme aims to achieve economic growth by reducing an intensive and irrational use of natural resources. It identifies 7 priority directions to green the economy: in particular, green energy sector, low emission and clean transport, green agriculture, green industry, waste management, sustainable tourism, green cities. Almost all the priority directions are directly related to the 4 sectors selected for the proposed TNA work. The Programme also aims to introduce sustainable financing of green economy activities in the banking and microfinance to promote green economy.

In order to increase its adaptive capacity and fulfill its international climate commitments, the Kyrgyz Republic plans adaptation measures in the sectors of water resources, agriculture, public health, climate emergencies, energy, forest resources and biodiversity. These measures were developed and approved by the Decree of the Government of the Kyrgyz Republic dated from October 2, 2013 No. 549 'Priority directions for adaptation to climate change in the Kyrgyz Republic until 2017'. Due to the fact that this document is now outdated, a new Readiness support proposal for the development of a NAP was developed and submitted to the GCF. It was approved by the GCF on 18 May 2020.

A number of international assistance activities supported the country's efforts over the last few years.

The Climate Investment Programme (CIP), Operational Framework for Managing and Accessing Climate Finance in the Kyrgyz Republic, was finalized in May 2018 as a part of the Climate Investment Funds' Pilot Programme for Climate Resilience (CIF PPCR). The overall objective of the CIP is to serve as a working mechanism for managing access to climate finance in the Kyrgyz Republic and guidance on identifying investment needs. It aims to facilitate adaptation measures in key climate sectors of the economy and support the Kyrgyz Republic in attracting resources through international climate finance mechanisms to implement climate change resilience investment activities for identified 11 components, a number of which are also directly related to the 4 sectors identified for this Readiness support proposal, namely:

- Agriculture and Water: Component 2 on Improving food security from agriculture through improved water resources, land management and agricultural practices;
- Energy: Component 3 on Making energy supply infrastructure climate resilient; Component 6 on Making buildings climate resilient

 In addition, Component 9 on Enhancing private sector participation in climate resilience relates to the proposed activity on Enhancing capacity of the private sector to deploy climate technologies.

Within the framework of the PPCR program, given the large volume of expected activities in the field of climate change, as well as the objective need to strengthen institutional capacity, the Government of the Kyrgyz Republic officially established the <u>CFC</u> of the Kyrgyz Republic on August 14, 2017 - an institutional mechanism to coordinate climate finance issues in the country. A grant agreement between the European Bank for Reconstruction and Development (EBRD) and CFC ensured funding for the first three years of CFC activity. The agreement was signed in August 2018 and the Center began to operate in October 2018.

The FAO completed implementation of activities under the GCF Readiness grant approved in 2016. This Readiness support grant aimed to support human resources development, raise the awareness level of the financial sector and provide technical assistance to the NDA to strengthen its capacity to effectively engage with the GCF, support stakeholder coordination and engagement, and provide an overall monitoring and oversight of the GCF related activities at the country level. The Government of the Kyrgyz Republic introduced changes to the NDA structure and now the Ministry of Economy is nominated as the new NDA to the GCF. The <u>draft GCF Country Programme</u> has been adjusted and submitted to the NDA with the project pipeline yet to be finalized. The proposed TNA work will provide a scientific and technical basis to identifying the most appropriate climate technologies using a multi criteria analysis (MCA) and a market trends analysis, which will help finalise the project pipeline to be included into the draft GCF Country Programme.

Prior to the implementation of the Readiness support mentioned above, governmental institutions holding direct climate change responsibilities had a very basic, limited and fragmented information on GCF's operations. The readiness support allowed the NDA to spread knowledge and engage national and local stakeholders on key needs and priorities that can be tackled through the GCF assistance. The proposed TNA work will build upon this established framework.

Further, stakeholders to be involved into national climate finance activities were mapped. In particular, an effort was put into engaging the private sector through identifying key challenges and bottlenecks it faces in the Kyrgyz Republic. A document on 'Private Sector engagement in the Cooperation with the GCF in the Kyrgyz Republic' was prepared in Russian and English languages. Consultations with the private sector helped identify potential project ideas to be included in the country project pipeline. The proposed TNA work will build upon this knowledge and further investigate which market mechanisms can support a more active participation of the private sector.

Activities listed under the Gender Action Plan to the GCF on Climate Services and Diversification of Climate Sensitive Livelihoods to Empower Food Insecure and Vulnerable Communities in Kyrgyz Republic, with the world Food Program (WFP) as a Delivery Partner, is under implementation and the activities under this proposal are not directly related to the TNA activities proposed here since they lie in the downstream side of the technology application.

Similarly, the Funding proposal to the GCF on Carbon Sequestration through Climate Investment in Forests and Rangelands (CS-FOR), with FAO as the Delivery Partner, aims to foster investments into rangeland and forestry management, strengthen national and local institutions, introduce market-driven incentives and local planning processes. These proposed activities do not overlap with the activities foreseen under the present Readiness support proposal. However, linkages between the two Readiness supports will be established during their respective implementation.

Finally, the country put a commendable effort into strengthening its institutional capacity to deliver on climate change adaptation and mitigation activities. By the Governmental Resolution of 20 January 2020, the Ministry of Foreign Affairs became the new Focal Point to the UNFCCC, the Ministry of Economy was appointed as the NDA to the GCF and the CFC as the NDE to the CTCN. In addition, the country established a high-level Coordination Council on Green Economy Development and Climate Change (CCGEDCC) and merging the former separate Committees on Climate Change and on the Green Economy Development, which showcases the primary importance the country confers to a climate change sensitive economic development. One of the Council's roles is to coordinate attraction of green investments and climate finance to the country. The CFC became the Secretariat of the CCGEDCC. However, it may be noted that the CCGEDCC is only a high level inter-ministerial coordination mechanism where GCF matters will be discussed.

3. However, major sectoral challenges prevent the country from strengthening its climate change preparedness

Kyrgyz Republic has put significant efforts into developing policies, strategies and plans related to climate change mitigation and adaptation, however major sectoral challenges still prevent the country from strengthening its climate change preparedness. The first two Readiness support proposals helped the country summarise existing national climate change priorities, policies, strategies and plans. This work was further deepened during the preparation phase of the present and third Readiness support proposal by a detailed assessment of key national documents and extensive stakeholder consultations. Stakeholder engagement helped identify that **key vulnerabilities are in the agriculture, energy, water and solid waste sectors**. They also helped foresee which climate sensitive technology solutions could help address these vulnerabilities. The country is yet to complete its NAP and its National Adaptation Programme of Action (NAPA), and the NDC does not detail sectoral actions. However, key policy documents such as the Third National Communication, the draft GCF Country Programme, the CIP and the National Development Strategy 2018-2040 provide specific sub sectoral related goals and recommendations. Finally, the Green Economy Development Programme for 2019-2023 summarizes key provisions of the earlier policy documents and highlights directions for action.

 Agriculture: The Kyrgyz Republic is an agrarian economy (USAID, 2020), which contributes to 15% of the country's total GDP and provides employment to 30% of the economically active population (FAO, 2018). The sector also accounts for **30% of the country's total emissions** (FAO, 2018) **and is very vulnerable to climate change** with crop yields being unstable and fluctuating from year to year (FAO, 2018), which already hampers the food security of the country. According to the draft GCF Country Programme, 46.4% of the population consumes less than 2100 kcal per day. **Malnutrition** in the country may exacerbate with climate change. An **outdated infrastructure** of the sector further deepens this vulnerability. As per the CIP of the Kyrgyz Republic, only 15% of farm machinery has been upgraded in the last 2 decades. Agricultural storage is underdeveloped with 15% of agricultural produce getting spoiled before it reaches the market because of an inadequate storage capacity and **farmers lacking access to updated technologies** (World Bank, 2016).

The sector's needs include **increased water efficiency**, upgrading the irrigation system to **new irrigation technologies** and introducing **new agricultural production methods** while remaining environment friendly and strengthening an organic orientation of the agriculture. More specifically, the following policy documents highlight the importance of using advanced resource-saving technologies such as drip or pulse irrigation: draft GCF Country Programme, Third National Communication, National Development Strategy 2018-2040 and Climate-Smart Agriculture for the Kyrgyz Republic (World Bank). In addition, the draft GCF Country Programme also refers to developing **climate resilient crops** as a key strategic action to adapt the agricultural sector to climate change. According to the Green Economy Development Programme, irrigation and the entire agro-production chain need to be made more efficient through climate sensitive technologies.

There are synergies between this Readiness support proposal and the NAP Readiness support proposal. The adaptation plan under the NAP will provide guidance on the need of specific agriculture technology for the TNA and the TAP, and the present Readiness support proposal will share specific solutions to address barriers identified by the NAP in the agricultural sector.

• Energy: The energy sector represents 4% of GDP and 16% of the industrial production (IEA 2020). Nearly 59% of the country's emissions come from the energy sector (INDC, 2015). The hydropower share in the electricity generation is over 90%. River basins supplying water to large HPP depend upon glacial melt water and snowmelt. Decreasing volumes of glaciers and consequently shrinking lakes make the electricity sector very vulnerable (Third National Communication, 2016). The sector is further fragilized by very low electricity tariffs, which does not incentivize the sector to invest into much needed energy efficient technologies or massively introduce renewable energy technologies. For example, transmission and distribution networks are outdated and vulnerable to climate-related hazards. Transmission network losses exceed 25% of the generated energy (UNECE, 2018). Over 70% of steam and hot water networks are older than 25 years, and 45% of the electricity generation capacity is beyond its lifecycle (Climate Investment Programme, 2018). The residential sector accounts for nearly 60% of the country's electricity consumption. An important factor contributing

to this high share of a residential energy consumption is a weak energy performance of the existing residential buildings stock. Basic energy efficiency measures, such as insulation of the building envelope or replacement of windows and doors, could reduce the energy consumption in public buildings by nearly 30% (World Bank, 2019).

Investments are urgently needed to increase the electricity supply and to reduce the electricity demand through energy efficient technologies in order to keep up with the growing electricity demand. The government aims to reduce GHG emissions from the sector and address the above challenges by encouraging environment friendly energy sources and increasing energy efficiency in buildings, industries and transport.

According to the Green Economy Development Programme, the share of renewable energy sources in Kyrgyzstan amounted to 1.5% of the total electricity production in 2017. By 2040, the **share of environment friendly energy sources is expected to be at least 10% in the total energy mix** (National Development Strategy, 2017). To take the achievement of this target one step further, the Kyrgyz Republic wants to stimulate investments into small hydropower, solar and biogas projects. However, the potential of these renewable energy sources remains to be estimated and the issue of land allocation for small HPP acts a major barrier. Overall, the program identifies increasing transparency of the electricity and heat generation, increasing energy efficiency on the demand side, in buildings and in the transport sector (compressed natural gas (CNG) in the public transport sector and e-vehicles), as well as increasing the share of renewable energy sources in the energy mix as **priority sub-sectors** to achieve a green economy in the country.

In particular, the draft GCF Country Programme and the CIP recommend replacing outdated turbines and generators of new and existing power plants and improving operating efficiency of existing HPP by introducing technology and technical designs. In addition, the draft GCF Country Programme and the Third National Communication also highlight the importance of using renewable energy sources.

The Kyrgyz Republic is a party to regional project in Central Asia Regional Economic Cooperation (CAREC) region on Fostering Expanded Regional Electricity and Gas Interconnection and Trade under the CAREC Energy Strategy 2030. This project aims to improve regional energy connectivity, scale up investments and achieve higher sustainability and inclusiveness in CAREC's energy sector. To achieve these goals, the project will (i) produce preparatory works for the establishment of a new regional transmission cooperation association, (ii) strengthen government capacity to carry out market reforms and attract investors, (iii) establish a financing vehicle for green energy projects and foster consumer awareness for energy efficiency and (iv) establish a women-in-energy program to increase women participation in the energy sector. The TNA work will take into consideration outcomes of parts (ii) and (iii) of this project into the TAP part related to energy technologies.

Water Resources: The Kyrgyz Republic's water resources are concentrated in glaciers, lakes, rivers and groundwater. The average surface water flow of the country is estimated to 47km3 per year, of which approximately 44km3 originate from rainfall, snow and glacier melt, the rest coming from the irrigation return flows. Between mid-1970s and 2000, the glacial volume decreased by 15% (Third National Communication, 2016). Issyk-Kul Lake represents 99.2% of the total volume of lakes in the country. Its water is salty and unfit for water supply (Third National Communication, 2016). Climate change is likely to make droughts more frequent and severe, implying that the Kyrgyz Republic will need an efficient water management system in place (ADB, 2013). Unequal access to water exacerbates food insecurity. The CIP of the Kyrgyz Republic assessed that the current water infrastructure is old and was built 40 to 50 years ago. Water losses are estimated to be over 45% of the supply (Climate Investment Programme, 2018). As per the draft GCF Country Programme, access to drinking water decreased from 92.4 % in 2011 to 89.2 % in 2016 due to degrading water systems (GCF Country Programme, 2020).

The government aims to address these challenges by **improving the demand-side water efficiency**. In particular, the draft GCF Country Programme and the CIP recommend establishing a water meter and water leakage detection system and the latter highlights the importance of introducing the use of drip or pulse irrigation, rainwater harvesting and storage programs as well as hubs to promote and introduce water conservation technologies. Finally, the National Development Strategy 2018-2040 aims to reduce waste water formation by introducing low-waste, resource-saving technologies. According to the Green Economy Development Programme, modernizing the irrigation infrastructure is key to increasing water resource efficiency in the country and, while industrial water usage represents only 0.67% of the total national water usage, the Programme highlights rapid growth of industrial water intensity: in 2017, the latter increased by 27% compared to 2016.

The proposed TNA work will take into account the outcomes from the EBRD project on Promoting Climate Resiliency of Water Supplies in Kyrgyzstan. (GEF-SCCF). This EBRD project included rehabilitation of water infrastructure, and institutional and human resource capacity development for water companies and city authorities to improve water resources management. The proposed TNA work will also incorporate lessons learned from the GEF project's community involvement activities, which included the formation of citizen water use committees in addition to developing technology roadmaps and action plans for identification and scale up of technologies for water conservation, recycling, network loss avoidance etc.

 Solid Waste Management: As per the Central Asia Waste Management Outlook report, the Kyrgyz Republic generates 1 million tons of municipal waste per year and 10 million tons of industrial waste, most of it coming from the Issyk-Kul province gold mining sector. About 100 million tons of industrial solid waste has already been accumulated in the Kyrgyz Republic since independence. The average increase in municipal waste in Bishkek city is 20% per year. The generation of household waste is steadily increasing and about 1,000 tons of solid household waste is daily collected and shipped to the landfill near to Bishkek city. Most of this waste is collected and sent for disposal at about 50 legally operating landfills, but part of it ends up in hundreds of unofficial waste dumps. These landfills do not meet the environmental and health safety requirements.

It is estimated that about 40-50% of the volume of solid domestic waste is from packaging waste. According to the National Report on the State of the Environment of the Kyrgyz Republic for 2015-2018, one of the main sources of pollution in the urban areas is industrial waste generated as a result of production processes and solid domestic waste. The total volume of accumulated and annually generated waste as well as the area of land allocated for waste disposal are increasing. Waste reduction and reuse as well as low-waste technologies are hardly developed. To date, the country's solid waste is essentially either disposed into a landfill or incinerated.

By the end of 2018, 135.7 million of waste were accumulated by 259 companies, excluding waste from mines and quarries, which amounted to about 2 billion tons. The Green Economy Development Programme highlights that only a very minor part of these does not represent a major risk for the national ecology. In 2018, 1.9 tons per person of waste of first, second and third classes, or hazardous waste, were generated in the country. In 2018, over 1 million tons of solid domestic waste was disposed into 406 landfills and dump sites, which amounts to 162.9 kilograms of solid domestic waste per person. There is no separate waste collection (food waste, waste paper, textiles, scrap metal, etc.) system. Neither household waste sorted and used as secondary raw material, nor a comprehensive waste processing system exists in the country. It is estimated that packaging waste accounts for about 30% of households' solid waste, food waste for about 20% and organic waste for about 12%. In rural areas, over 40% of rural households dispose of waste through burning (up to 70% in some regions), which heavily contributes to GHG emissions.

Despite a significant number of legal norms in the field of solid waste management, a comprehensive regulation of waste disposal that ensures environmental safety is not achieved. There is a failure of the regulatory mechanisms and failure of incentives. All the landfills have exhausted their service life while the local authorities have insufficient financial resources to introduce sustainable technology solutions. The government aims to address these challenges by improving legislation on certain types of waste suitable for recycling, building waste recycling plants, waste sorting plants and opening industries that produce secondary raw materials, introducing and developing a separate collection system, or identifying processes and best practices for low waste alternative technologies.

In September 2020), the UNDP has invited applications from innovators, representatives of the private sector and civil society to participate into an eco-competition on solid waste management. The competition will help develop diverse and effective ideas focusing on:

- Public awareness campaigns on segregated waste collection;
- Waste reduction:
- o Increase the percentage of recycling and reuse of materials;
- Support for segregated waste collection infrastructure;
- Implement new technologies in existing or new enterprises related to processing / sorting / production from recycled materials.

The TNA work will look at the barriers preventing implementation of regulator or incentive mechanism and identify market-based mechanisms to enhance compliance with the regulations. The role of the private sector will be to focus on circularity to establish cost economics as part of activity 1.3.2. It will also look at the outcomes of the UNDP eco-competition results and incorporate them into the list of project ideas, to be used to develop bankable projects under outcome 4.

The analysis above shows that all the key sectors of the Kyrgyz economy cannot meet the country's socioeconomic development and climate resilience objectives due to being dependent on outdated technologies. A number of barriers prevent the country from utilizing modern technologies in these sectors:

- A comprehensive system to develop and implement a sectoral TNA is lacking among concerned country's stakeholders. There is no formal coordination mechanism to oversee and structure these efforts.
- The country lacks a strategic framework to improve sectoral expertise in climate technologies. It needs to identify and prioritise most appropriate technologies for different sectors of the economy but does not have a methodology to do so and has no action plan to deploy climate technologies on the ground.
- No robust climate sensitive technology project proposals are being formulated in the country, which leaves the country lacking funding inflows into its climate technology projects and further delays climate technology deployment.

4. The Sectoral TNA aims to address the identified barriers

In response to these barriers, the sectoral TNA will help reduce the impacts of climate change by integrating, deploying and disseminating climate change adaptation and mitigation technologies into key sectors of the economy. Preliminary work conducted to prepare the present Readiness support proposal identified 4 interdependent priority economic sectors: agriculture, energy, water and solid waste

management. The energy sector includes energy efficiency and renewable energy sources and encompasses the residential and public buildings, industry, energy generation and transport sub-sectors. In addition, the NDA and NDE requested to add solid waste management as the forth sector.

At present, the absence of a comprehensive Sectoral TNA makes it difficult to determine the level and extent of support the country requires to successfully implement the NDC, the Sustainable Development Goals (SDG) and other climate and development commitments. To conduct such an assessment, the country's **stakeholders lack** capacity, specialized knowledge and skills. The proposed TNA work will help the country address these challenges by developing a Sectoral TNA and a TAP that will guide the Sectoral TNA implementation. The following steps will lead to this goal:

- Develop a project coordination mechanism within CCGEDCC with the support of the NDA and the NDE to ensure effective and inclusive implementation of this proposal¹;
- Increase coordination and capacity among relevant stakeholders regarding deploying climate technologies;
- Develop a TNA, which will include identification of concrete technologies in four sectors that will support the Kyrgyz Republic's country programming;
- Develop a TAP that will include specific recommendations to scale up and deploy most suitable technology in each of the selected sector and an action plan to address barriers to introducing and disseminating prioritised technologies identified in the TNA;
- Prepare three GCF concept notes which will include prioritized technologies identified in the TNA. The CN will build on the pipeline of projects developed under the first GCF readiness proposal.

Members of the Sectoral TNA Committee will include a Coordinator and representatives from governmental institutions, private sector, civil society, academia and international development partners (UNDP, FAO etc.) as observers. The Committee will ensure a gender balance and an appropriate representation from vulnerable groups. The Sectoral TNA Committee will be engaged at all important steps of the Sectoral TNA process to ensure national consultation and country ownership.

Since the CFC is designated as an NDE to the CTCN, the Sectoral TNA Committee will utilize its office for its daily activities. Sectoral TNA Committee's and working groups' meetings will however be conducted in dedicatedly rented spaces.

¹ In January 2020, the Kyrgyz Republic established a high-level **CCGEDCC**. This Council includes high level representatives from all key Ministries as well as from key non-governmental stakeholders such as the civil society or the private sector. The Sectoral TNA Committee will be established within the existing CCGEDCC and will comprise a number of CCGEDCC members to optimize synergies with the on-going climate work in the country. The Committee will **formally meet every quarter** to provide strategic guidance, address concerns that may arise in the course of work and facilitate reporting on the Sectoral TNA progress.

3. LOGICAL FRAMEWORK

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
Outcome 1.3 Relevant country stakeholders (which may include executing entities, civil society organizations and private sector) have established adequate capacity, systems, and networks to support the planning, programming, and implementation of GCF-funded activities	Baseline1.3.1 A CCGEDCC was formed in January 2020. However, it is yet to build capacity to support GCF- funded activities. Also, working groups and a formal coordination mechanism to implement the Sectoral TNA are not in place.	Target 1.3.1 CCGEDCC's capacity required to deploy climate technologies in the country as well as supporting sectoral working groups are in place and enhanced through the training and experience received within the TNA committee	Output 1.3.1 Coordination mechanism for the implementation of the Sectoral TNA established and capacity among stakeholders on the TNA process increased	Activity 1.3.1 Institutionalize a coordination mechanism to implement the Sectoral TNA Sub-activity 1.3.1a Establish a Sectoral TNA Committee A Sectoral TNA Committee is the key guiding body throughout the Sectoral TNA process. Its role is to provide high-level guidance and help secure political support for the finalized TAP. The NDA and NDE will play a leading role in supporting the establishment of the Sectoral TNA Committee. The exact composition, role and responsibilities will be determined with the NDA and the NDE. This activity will: Identify and engage the Sectoral TNA Committee members; Prepare the Sectoral TNA Committee constitution document, in which roles of different members as well as rules and procedures of the Sectoral TNA process will be defined; Institutionalize an effective coordination mechanism.	Deliverable 1.3.1a (i) List of CCGEDCC members taking part to the Sectoral TNA Committee Deliverable 1.3.1a (ii) Sectoral TNA Committee guidelines clarifying responsibilities and work processes to support the TNA process Deliverable 1.3.1a (iii) Sectoral TNA Committee work plan Deliverable1.3.1a (iv) Quarterly reports of the Sectoral TNA Committee meetings.

² Please briefly elaborate on current baselines on which the proposed activities can be built on, processes that are in place that the current Readiness proposal can strengthen, or any gaps that the proposed activities would fill in. If more space is needed, please elaborate this in Section 4.

³ Please include tangible and specific deliverables for each activity proposed, Please note that during implementation all deliverables should be included within the implementation reports for GCF consideration.

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
				Sub-activity 1.3.1b Map stakeholders and establish stakeholder working groups to actively contribute to the Sectoral TNA process	
				The Sectoral TNA process will identify priority subsectors, priority climate technologies, analyze barriers to implement these technologies, develop and validate a TAP, and set up an enabling implementation environment for the TAP. To successfully execute this work, it will engage all key stakeholders that represent the selected 4 sectors. To ensure extensive stakeholder participation, a stakeholder working group will be established for each priority sector, namely: • An agriculture working group; • An energy working group; • A water working group; • A solid waste management working group.	Deliverable 1.3.1.b (i) Stakeholder mapping report, where roles and responsibilities are specified, and an exhaustive list of stakeholders is provided (including those who were not retained to be part of stakeholder groups); Deliverable 1.3.1.b (ii) Workplan for each stakeholder working group; Deliverable 1.3.1.b (iii) Stakeholder working groups' meeting reports.
				To facilitate strategic decision making and cross- sectoral cooperation, the four working groups will be established under the Sectoral TNA Committee.	
				The network member will closely work with these stakeholder working groups throughout the process to ensure all stakeholders have contributed to it.	
				The stakeholder input will be critical to select subsectors and technologies and inform the technology fact sheets , which will result in robust project concept notes submitted to the GCF.	
				The Sectoral TNA Committee will validate stakeholder working groups and facilitate their active engagement throughout the sectoral TNA process.	
				Sub-activity 1.3.1c Capacity building workshops	

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
				Two sets of capacity building workshops will be organized to familiarize stakeholders with the Sectoral TNA process. Set 1 will target the Sectoral TNA Committee members, take place right after the formation of the Committee and will familiarize the Committee members with: • The overall Sectoral TNA process, its objectives, steps and timeline; • Participatory planning and prioritization tools (e.g. Multi criteria assessment tool, stakeholder engagement tools, and approaches for gender inclusiveness) to map and effectively engage stakeholders; • Understanding and applying environmental and social safeguards throughout the Sectoral TNA process, including maintaining the gender balance and taking into consideration environmental concerns when identifying and prioritizing technologies. Set 2 will be dedicated to stakeholders engaged by the completion of the Activity 1.3.1b and will include two parts: • The opening part will bring together the Sectoral TNA committee members and stakeholders, and cover the Sectoral TNA process objectives, targets, deliverables, timeline and coordination mechanisms. An important component of this part of the workshop will be to facilitate interaction between the Sectoral TNA Committee members and stakeholders with the view of establishing a favorable working climate between them.	Deliverable 1.3.1c (i) Workshop reports (including list of participants, photo and other relevant documentation) Deliverable 1.3.1c (ii) Pre and post training surveys to assess the impact of the training sessions completed

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
				The working part will target stakeholders from working groups and will focus on technical details of the work to be implemented through the Sectoral TNA process. It will outline support and inputs anticipated from stakeholders, showcase technical tools to be utilized during the process, share case studies from work conducted in other countries with similar conditions and address participants' questions. Sub-activity 1.3.1d Develop a work plan for the Implementor, the stakeholder working groups and the TNA Committee to implement the Sectoral TNA activities under the present Readiness support Together with the Sectoral TNA Committee, stakeholder working groups will develop an overarching workplan, which will include a timeline of activities, time bound milestones and a schedule of meetings. The workplan will ensure a systematic implementation of Sectoral TNA process by clearly defining roles and responsibilities of each stakeholder category. Each stakeholder working group will have defined their own sector specific workplan under Sub-activity 1.3.1b that includes a timeline of activities, time bound milestones and a schedule of meetings. The overarching workplan will create synergies between sector specific workplans and ensure milestones in their implementation are synchronized.	Deliverable 1.3.1d (i) An overarching workplan of activities for the Implementor, the stakeholder working groups and the TNA Committee to implement the Sectoral TNA activities under the present Readiness support. Deliverable 1.3.1d (ii) 4 sector specific workplans of activities for the Implementor to implement with inputs from each relevant stakeholder working group under the overarching coordination of the Sectoral TNA Committee.

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
Outcome 2.2: GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise and enhance enabling environments for GCF programming in low-emission investment	Baseline 2.2 Appropriate climate technologies are identified in a number of official documents, but the country has no strategic framework to enhance an enabling environment for low carbon and climate adaptation technology investments	Target 2.2 Sectoral expertise is coordinated and a strategic framework is set up to identify prioritize and operationalize low carbon and climate adaptation technologies in the country.	Output 2.2.1 TNA report developed covering 4 sectors: agriculture, energy, water resources and solid waste management	Activity 2.2.1 – Identify and prioritize appropriate climate technologies to introduce and disseminate in the Kyrgyz Republic Sub-activity 2.2.1a – Select sub-sectors for the Kyrgyz Republic Sectoral TNA The objective of this activity is to reach a consensus on the priority sub-sectors in which climate technologies will be identified and prioritized. The GCF Country Programme will represent the main baseline, with other international and national initiatives complementing the process and serving as a crosscheck reference to ensure country ownership. Sub-activity 2.2.1b – Select appropriate adaptation and mitigation technologies The aim of this activity is to prioritize and validate key technologies aligned to the Kyrgyz Republic's NDC, the CIP - Operational Framework for Managing and Accessing Climate Finance, the Green Economy Development Programme and the TNA for Adaptation in the Water and Agricultural Sector in Central Asia. Stakeholder working groups related to the selected subsectors will identify highest impact technologies in their respective sectors, using a MCA through the following steps: • Undertake a review of existing planning documents and prepare technology factsheets; • Develop a criteria tree to assess adaptation and mitigation technologies and evaluate	Deliverable 2.2.1a (i) Report on identified priority sub-sectors justifying why these have been selected in line with national priorities and the country's international climate commitments Deliverable 2.2.1b (i) Sectoral TNA report summarizing all processes and outcomes of the Activity 2.2.1b including: -Technology fact sheets -Set of criteria for MCA exercise, detailing criteria tree and performance matrix -Decision-making meeting report (including a full list of participants and photo documentation - Selected and validated priority technologies

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
			Output 2.2.2 TAP developed and presenting a time bound framework to address existing policy gaps to enable a more favorable environment for low carbon and climate adaptation appropriate technology investments in the country	different technology options for the selected criteria. Using scoring, weighting and sensitivity analysis as described and amply tested by the Sectoral TNA process, a performance matrix will be developed to select high impact technologies Using this performance matrix, the Sectoral TNA Committee assisted by stakeholder working groups will select and validate priority technologies. All viable options will be presented and discussed, and priority will be given to technologies generating highest impact. Technologies will be prioritized using a MCA. Activity 2.2.2 – Develop and validate a Technology Action Plan Sub-activity 2.2.2a – Analyze barriers that prevent appropriate adaptation and mitigation technologies from being introduced and/or disseminated in the Kyrgyz Republic The objective of the barrier analysis is to assess market conditions for the technologies selected under Activity 2.2.1 and identify barriers to their use and dissemination. The following steps will be undertaken; Identify all possible barriers through a literature survey and interviews; Generate a list of barriers preventing the introduction and dissemination of technologies identified under the Activity 2.2.1; Further refine the list of barriers into economic and financial, market conditions, legal and	Deliverable 2.2.2a – Barrier analysis report, detailing barriers preventing selected technologies from being introduced and/or disseminated in the Kyrgyz Republic, and measures to address them.

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
				regulatory, institutional and organizational capacity and social, cultural and behavioral categories; • Identify measures to address these barriers. Sub-activity 2.2.2b Develop and validate a TAP to introduce and disseminate the selected technologies A TAP is a concise, step by step and time bound outcome of the Sectoral TNA process. It quantifies the potential impact of selected technologies and includes a financial plan, barriers to be addressed, a timeline, benchmarks and success indicators. The TAP preparation will follow the 4 steps below: 1. Propose a scale for the selected technologies' deployment 2. Set a frame for action • List feasible measures to overcome technology barriers identified in Activity 2.2.2 • Set actions needed for the successful implementation of technology in the country and define related activities • Identify stakeholders in charge of implementing the TAP and define their respective roles and responsibilities • Establish the TAP implementation timeline 3. Set an enabling implementation framework • Identify capacity required to successfully implement the TAP, assess existing capacities	Deliverable 2.2.2b (i) TAP report validated by the national stakeholders Deliverable 2.2.2b (ii) National consultation workshop report Deliverable 2.2.2b (iii) List of most relevant project ideas within the TAP to be transformed into Concept Notes

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
				 and design capacity building activities to ensure required capacity is timely built Estimate the cost of identified actions and activities and formulate a budget 	
				 4. Monitor, report and track implementation progress Prepare a risk contingency and management plan Define reporting and tracking parameters and timeline 	
				Discussion over the TAP draft will take place during a 2-day national consultation workshop . The network member will share the TAP draft on behalf of the Sectoral TNA Committee at least 2 weeks prior to the workshop. During the workshop, it will present the content of the TAP in detail and open the floor for comments and suggestions. The workshop will also aim at selecting the most relevant project ideas within the TAP to be transformed into Concept Notes .	
				Collected inputs will be documented and the TAP will be edited to reflect points of consensus. The revised draft will be circulated to the workshop participants for a final validation.	
				Finally, the Sectoral TNA Committee will validate the TAP.	
Outcome 2.4 Strategies for	Baseline 2.4	Target 2.4	Output 2.4.1	Activity 2.4.1 Empower the private sector stakeholders to deploy climate technologies	
transforming and attracting private sector investment for low emissions	The country has not identified legal and	Road map developed to address legal and regulatory barriers developed and a	Feasible measures to support deployment of climate technologies by the	The Kyrgyz Republic identified the private sector as a key player to deploy climate technologies in the country.	

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
and resilience developed and being used	regulatory measures to support deployment of climate technologies and has not generated data on most reliable and cost effective local and imported technologies available on the market, which slows down these technologies' deployment by private stakeholders	strategic framework established to empower and strengthen private sector engagement	private sector are identified, local technology market potential is assessed, an open access technology portal is operational and private sector's stakeholders trained in utilizing the portal.	Private sector stakeholders are hence the focus of the present activity. Sub-activity 2.4.1a Elaborate a roadmap To facilitate a sound climate technology market formation, stakeholder working groups will elaborate a roadmap of feasible measures to achieve the private sector's engagement in the four economic sectors targeted through the present TNA work. In particular, the following 3 areas will be looked at in detail: Incentivizing and penalizing mechanisms to introduce at a policy and regulatory level to foster transition towards the use of clean technologies; Support import of climate friendly technologies that are not available within the Eurasian Economic Community (EurAsEC) by lowering duties and taxes; Raise quality standards of the energy efficiency (EE) and renewable energy (RE) equipment by applying control, monitoring and guarantee measures and by enhancing maintenance services. Sub-activity 2.4.1b Foster a local technology market development by supporting the use of local resources This sub-activity will identify key local materials that can be effectively utilized and/or reused to increase energy efficiency. It will include developing recommendations on a financial mechanism that could catalyze the growth of	Deliverable 2.4.1a (i) Road map listing identified feasible actions to utilize, produce and mainstream climate technologies into the private sector's operations Deliverable 2.4.1b (i) Assessment report on specific sub-sectors and technologies with the highest local economy formation potential

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
				local startups manufacturing such clean technologies as well as developing recommendations on an incubating mechanism dedicated to start-ups.	Deliverable 2.4.1b (ii) Recommendations on which financial and incubator mechanism/s would best catalyze growth of local startups in developing climate change and local context sensitive technology solutions for the country
				Sub-activity 2.4.1c Strengthen capacity of private sector stakeholder representatives This activity will collect and systemize information on climate technologies available on the Kyrgyz market, their respective advantages and their brief cost-benefit analysis in an open access technology portal. Subsequently, a capacity building workshop will be organized for private sector stakeholder representatives and help: • Raise awareness on business advantages related to utilizing climate technologies versus business-as-usual technologies; • Inform of measures identified under Activity 2.4.2a likely to be adopted by the government of the Kyrgyz Republic; • Guide through the open access technology portal; and, • Train trainers who will be in a position to further spread the knowledge in various localities of the Kyrgyz Republic.	Deliverable 2.4.1c (i) Open access technology portal developed and maintained Deliverable 2.4.1c (ii) Training and training of trainers packages developed Deliverable 2.4.1c (iii) Pre-and post-training surveys to assess the impact of the training sessions completed Deliverable 2.4.1d (iv) Training report

Outcomes	Baseline ²	Targets	Outputs	Activities (brief description)	Deliverables ³
Outcome 4.1 An increase in the number of quality project concept notes developed and submitted	Baseline 4.1 CN on food security (FP 116) and climate smart transformation of land use practices (SAP 002) have been approved and CN on Improved climate resilience of agricultural livelihoods in the Kyrgyz Republic through scaled-up on-farm water efficiency was submitted by UNDP and rejected by the GCF. No CN is currently under consideration and no CN has ever been developed in the energy and solid waste management sectors.	Target 4.1 3 quality climate sensitive technology related CN prepared and submitted to the GCF Country project pipeline in line with its international climate commitments is strengthened	Output 4.1.1 3 CN prepared in line with the GCF guidelines and submitted to the GCF	Activity 4.1.1 Develop 3 project CN to submit to the GCF The activity includes identifying, prioritizing and selecting 3 viable project ideas emerged from the TAP, which will be developed into 3 GCF CNs. This activity will build upon the workshop under Activity 2.2.2b, which will include selecting the most relevant project ideas within the TAP to be transformed into CNs. Concept notes will be developed so as to enable the NDA request GCF's further support. The NDA is free to get any accredited entity submit the CN or the associated Project Preparation Facility (PPF) applications.	Deliverable 4.3.1 (i) Report on project ideas considered, prioritized and selected Deliverable 4.3.1 (ii) 3 CN developed

4. THEORY OF CHANGE

Goal: Establish a climate technology framework in the country to help it achieve a steady climate resilient socio-economic development

Goal statement: If the Kyrgyz Republic develops an inclusive and country driven sectoral TNA and TAP, then it will have an established climate technology framework that will help it achieve a steady climate resilient socio-economic development because the country will have identified and created an action plan to tackle barriers preventing climate technologies from helping the country address its climate vulnerabilities and mitigate its GHG emissions.

Outcomes

1.3 Relevant country stakeholders have established adequate capacity, systems and networks to support the planning, programming and implementation of GCFfunded activities.

Outcomes

- 2.2 GCF recipient countries have developed or enhanced strategic frameworks to address policy gaps, improve sectoral expertise, and enhance enabling environments for GCF programming in low-emission investment.
- 2.4 Strategies for transforming and attracting private sector investment for low emissions and resilience developed and being used

Outcomes

4.1 An increase in the number of quality project concept notes developed and submitted.

Outputs

1.3.1 An effective and inclusive TNA work coordination mechanism to implement the Sectoral TNA established within the CCGEDCC with the support of the NDA and NDE.

Outputs

- 2.2.1 Technology Needs Assessment (TNA) report developed covering 4 sectors: agriculture, energy, water resources and solid waste management.
- 2.2.2 Technology Action Plan (TAP) developed and presenting a time bound framework to address existing policy gaps to enable a more favorable environment for low carbon and climate adaptation appropriate technology investments in the country.
- 2.4.2 Feasible measures to support deployment of climate technologies by the private sector are identified, local technology market potential is assessed, an open access technology portal is operational and private sector's stakeholders trained in utilizing the portal.

Outputs

4.1.1 Three concept notes prepared in line with the GCF guidelines and submitted to the GCF

Inputs

CCGEDCC established in January 2020. CFC designated as its Secretariat and performing the role of the NDE to the CTCN.

Sectoral stakeholders pre-identified during the preparation of the draft GCF Country Programme and the preparation of the present Readiness support request.

Inputs

Thorough assessment of sectoral needs conducted in the frame of the Green Economy Development Programme.

Preliminary assessment of technology needs conducted in the frame of the Climate Investment Programme, the Green Economy Development Programme and the draft GCF Country Programme.

Inputs

Two approved concept notes to the GCF.

Preliminary work on attracting climate finance into the country conducted in the frame of the the Climate Investment Programme, the Green Economy Development Programme and the draft GCF Country Programme.

Barriers: A comprehensive system to develop and implement a sectoral TNA is lacking among concerned stakeholders

Barriers: The country lacks a strategic framework to improve sectoral expertise in climate technologies

Barriers: The country lacks funding inflows into the climate technology projects

Assumptions: The Kyrgyz Republic committed to reducing GHG emissions by using efficient and energy saving technologies; developing renewable energy sources; by 2040, the share of environment friendly energy sources should be at least 10% in the total energy mix; climate resilient water resources management system and agriculture are top adaptation priorities. It recently adopted a number of strategic policy documents: the Third National Communication, the Nationally Determined Contribution (NDC), the National Development Strategy of The Kyrgyz Republic 2018-2040, the Green Economy Development Programme for 2019-2023 and the draft GCF Country Programme.

The Kyrgyz Republic is highly vulnerable to climate change and needs to strengthen its climate resilience to achieve its socio-economic goals. Similarly, the country committed to pursue a low carbon development path. Deploying climate change adaptation and mitigation technologies could significantly advance the country in attaining these goals.

In this respect, the Kyrgyz Republic took important steps to set up a supportive base to address its climate change concerns, which act as favourable assumptions to build the proposed work upon. Key policy documents such as the National Development Strategy of the Kyrgyz Republic 2018-2040, the Green Economy Development Programme for 2019-2023, the Third National Communication and the NDC contain commit to reducing GHG emissions by using efficient and energy saving technologies, bringing the share of environment friendly energy sources to at least 10% in the total energy mix by 2040 or prioritising climate resilience in agriculture and in the water resources management system. Finally, the recently established high level CCGEDCC provides a supportive framework to climate change adaptation and mitigation actions.

However, the country lacks important components to successfully create an enabling environment to deploy climate technologies. First, a comprehensive system to develop and implement a sectoral TNA is lacking among concerned stakeholders. Indeed, there is no formal coordination mechanism to oversee and structure these efforts. A number of qualified technical experts exist in the country, however their inputs are not coordinated and channelled. Stakeholders show interest in climate change technologies but lack sufficient capacity, information and instruments to mainstream them into their operations. Second, the country lacks a strategic framework to improve sectoral expertise in climate technologies. It needs to identify and prioritise most appropriate technologies for different sectors of the economy but does not have a methodology to do so and has no subsequent action plan to deploy them on the ground. The private sector needs a supportive environment and access to reliable technology related data to deploy climate technologies on the market. Finally, no robust climate technology project proposals are being formulated in the country, which leaves the country lacking funding inflows into its climate technology projects and further delays climate technology deployment.

The present TNA work proposes an integrated system to address these barriers. The CTCN has a long-standing proven system of conducting sectoral TNAs and preparing TAPs. In the frame of this system, a Sectoral TNA Committee, established under the CCGEDCC, will coordinate the country's efforts at a high level while sectoral working groups will channel national experts' inputs. Further, the Kyrgyz Republic will benefit from a detailed methodology on how to identify, prioritise and validate highest impact climate technologies in prioritised sub-sectors based on a country tailored MCA. Barriers to deploying these technologies will be subsequently identified, analysed and feasible ways of addressing them will be developed. A TAP will be developed and will indicate specific steps to undertake to deploy the selected technologies. It will include stakeholders in charge of implementing it, capacity building needs, funding requirements and a robust monitoring system. Stakeholders' capacity in deploying climate technologies will be built to ensure subsequent successful implementation of the TAP. Finally, three CN will be prepared to tackle the barrier of a lack of funding for the selected technologies' deployment. The above will ensure the country has all the enabling elements in place to implement the TAP. Importantly, the entire process takes place in a highly inclusive manner to generate strong ownership of the TNA work from all concerned stakeholders.

The above efforts are anticipated to establish a climate technology framework in the country to help it achieve a steady climate resilient socio-economic development. In this respect, capacity to implement GCF funded activities (Outcome 1.3), an enhanced enabling environment for the GCF programming in low-emission investment (Outcome 2.2) and an increased number of quality CN submitted to the GCF (Outcome 4.1) are seen as critical and instrumental to achieve this overarching goal.

5. BUDGET, PROCUREMENT, IMPLEMENTATION AND DISBURSEMENT PLAN

5.1 Budget plan

Please find the completed Budget Plan developed in the specified GCF format attached.

CTCN will be selecting a Network Member⁴ to implement the activities through a competitive tender process, evaluating complete technical and financial offers for the execution of the technical assistance. Due to the tendering process, the total budget might be different compared to the one approved by the GCF, but in no circumstances will it exceed the total budget amount approved by GCF.

Within CTCN technical assistance a minimum amount of 1% of total budget is dedicated to gender mainstreaming, assuring that the gender topic is properly embedded into the technical analysis and is assessed by a gender expert. The presence of a gender expert within the consultant's roster is a requirement within the ToR of the international tender to be published by CTCN.

CTCN gender mainstreaming tool will be used as baseline reference to assure that gender issues will be
included since the early stage of the technology prioritization of this Readiness support proposal and
throughout all the subsequent outputs. A description of the gender tool can be found at this link:
https://www.ctc-n.org/technologies/ctcn-gender-mainstreaming-tool-response-plan-development

5.2 Procurement plan

Please find the completed Procurement Plan developed in the specified GCF format attached.

Please note that overall financial management and procurement of goods and services under this Readiness support proposal will be guided by UN regulations, rules, policies and procedures and the Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement between the GCF and UNEP.

UNEP will be responsible for the implementation of the readiness activities and for procurement and contractual services, as well as reporting on the progress of this implementation in close coordination and strategic guidance from the NDA/FP. The procurement actions and the operational services will be carried forward in accordance with UN policies and procurement guidelines. None of the parties involved in the preparation of this Readiness support proposal can bid for the implementation of the TNA work in whole or in part.

CTCN procedure for procurement: for a request that is eligible and prioritized, the Climate Technology Managers in charge of the respective request sources the appropriate expertise to develop the Terms of Reference of the assistance (called 'Response Plan' as per CTCN procedures). The response plan provides specific information on the technical assistance to be delivered, including activities, outputs, expected outcomes and impacts, timeline, indicators or measuring assistance progress and success, stakeholders to be involved, etc. The response plan, once finalized, is signed by the national focal point of the CTCN in the concerned country (NDE), the institution which originated the CTCN request for technical assistance and the CTCN Director and constitutes the basis of the assistance to be implemented and monitored upon the approval and in cooperation with the NDA. Based on the needs and expertise required in the response plan, a CTCN Network Member will be selected to implement it.

The selection of the institution from the Network of CTCN for the implementation of activities of the technical assistance is conducted through a competitive procurement process as per UNEP Rules and Regulations, in line with CTCN procedures and with UN Rules and Regulations (being UNEP the host of the CTCN, and a specialized agency established under the UN Charter). The CTCN nurtures a Network of more than 550 expert organizations in the field of low-carbon and climate resilient technologies. The CTCN Network Members are drawn from organization from different countries worldwide and with work experiences across different countries including

⁴ Network Member: As per the COP decision 25/CP.19; Annex I, I.1.(h), "Network" means collection of institutions and other entities established in accordance with the criteria approved by the Advisory Board for the designation of members of the Network and its structure. Network Members are integral part of the CTCN and provide support in implementation of the technical assistance to countries and other activities. Role of network is further defined in COP decision 1/CP16 Para 123 (a) – (d)

conflict and post conflict zones. The procurement criteria for execution of this work with ensure procuring of organization with pre-requisite working experience in such environments. The required expertise to carry out the activities that define this intervention will be sourced from the Network. For this, the following four principles shall be given due consideration when undertaking the procurement functions of UNEP:

- i. Best value for money principle;
- ii. Fairness, accountability, integrity and transparency of the procurement process;
- iii. Effective competition:
- iv The best interest of the UNEP.

5.3 Implementation Plan

Please find the completed Implementation Plan developed in the specified GCF format attached.

Further, as per clause 3.07 of the Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement entered into between UNEP and GCF on 2 June 2020, the implementation period will be the period beginning from the date that the Fund notifies the Applicant and ending five (5) months after the expiration of the anticipated duration of the type of readiness support sought as specified in such Approved R&P Support Proposal, including any extensions approved by the Fund.

5.4 Disbursement schedule

UNEP as the Delivery Partner for this Readiness support proposal will submit disbursement requests for approved proposals to the GCF in accordance with the Framework Readiness and Preparatory Support Grant Agreement between the GCF and UNEP. Disbursement requests will be signed by the authorized representative of the UNEP and will include details of the bank account into which the grant will be deposited. UNEP, the Delivery Partner for this Readiness support proposal for the Kyrgyz Republic, will administer the grant disbursed by the GCF in accordance with UNEP's regulations, rules, and procedures including maintenance of records of grant, disbursements and expenditure.

☑ Readiness Proposal that falls within a Framework Agreement with the GCF

Disbursements will be made in accordance to Clause 4 "Disbursement of Grants" and Clause 5 "Use of Grant Proceeds by the Delivery Partner" of the Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement entered into between UNEP and GCF on 2 June 2020. The Delivery Partner is entitled to submit 2 request(s) for disbursement each year and is also entitled to request one interim request for disbursement within 30 days of notification of approval.

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6. IMPLEMENTATION ARRANGEMENTS AND OTHER INFORMATION

6.1 Implementation arrangements

Please describe how implementation arrangements will be made and how funds will be managed by the NDA and/or the Delivery Partner.

UNEP will manage the funds for the activities under this Readiness support proposal as per United Nations (UN) regulations, rules, and procedures. UNEP will agree on a plan with the NDA and NDE of the Kyrgyz Republic to monitor the implementation of the activities. However, UNEP will be responsible for the implementation of the activities under this Readiness support proposal. Implementation of the activities under this proposal will be in accordance with a Second Amended and Restated Framework Readiness and Preparatory Support Grant Agreement entered into on 2 June 2020.

UNEP is the responsible party who will ensure the delivery of anticipated outputs and outcomes, which must report to the GCF on the TNA work's outcomes and report to the GCF.

The selected entity from the Network will report to UNEP as per their contractual arrangement and in line with UN rules and regulations. They will produce regular progress and financial reports and will submit deliverables to UNEP. Funds will only be released when the deliverables are satisfactory and cleared by UNEP. They will return any unspent funds within 90 days of expiry or notice of termination of the UNEP.

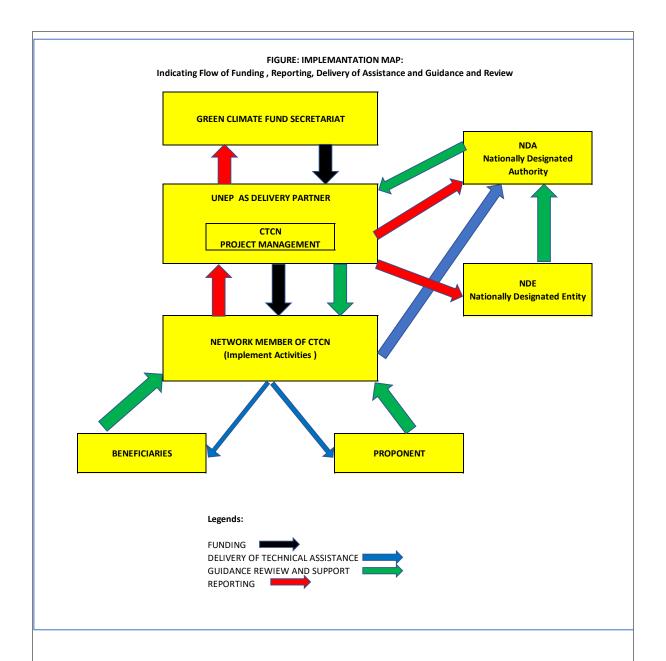
The UNFCCC country focal points for technology (NDE) and finance (NDA) will provide active support to the network member in the execution of this technical assistance. Their roles as country focal points will include, but not be limited to: Ensuring the activities associated with the implementation of this technical assistance are aligned with national climate priorities; promote and engage with key stakeholders as identified by the network member; promote and present this technical assistance in climate change-related events; and participate in CTCN events and in national workshops affiliated with this technical assistance, if required. They will also be expected to provide guidance and review any relevant documents produced and will be kept apprised of the progress of the technical assistance. The role of the NDE and NDA is that of coordination. They will seek inputs from relevant stakeholders in the various Ministries and members of the designated TNA committee and convey it to the UNEP/CTCN. The committee will ensure effective engagement of the country stakeholders to ensure country ownership of the process.

In terms of Governance: CTCN was established by Conference of the Parties (COP) in Cancun in December 2010. The CTCN was established to provide technical assistance and capacity building activities responding to requests from developing country parties Following competitive bidding, the COP decided that the CTCN would be hosted by UNEP through a consortium to be co-led by United Nations Industrial Development Organization (UNIDO). This is the CTCN 'host'. CTCN also has an extensive network of organizations that can collaborate to successfully deliver this TNA work. A network of 500+ organizations has subsequently joined the CTCN.

The CTCN (hosted by UNEP-UNIDO) aims to provide technical assistance to the Government of the Kyrgyz Republic, as per its COP Mandate, and is thus supporting the Kyrgyz Republic to develop this Readiness support proposal. The CTCN Engagement with the Government of the Kyrgyz Republic is mature with close co-operation between the NDA and NDE.

For this work in the Kyrgyz Republic, UNEP will be responsible for the implementation of the readiness activities and for procurement and contractual services, as well as reporting on the progress of this implementation in close coordination and strategic guidance from the NDA/FP. The procurement actions and the operational services will be carried forward in accordance with UN policies and procurement guidelines. UNEP has significant experience in delivering and supporting TNA work in developing countries. It has a wide network of local/ regional offices and expertise on the Central Asia region.

The implementation map below summarizes the different interactions between the different parties involved in this technical assistance.



6.2 Implementation and execution roles and responsibilities

CTCN processes before the selection of the Network Member

The CTCN process for managing technical assistance is the following: Requests for technical assistance can be prepared by any applicant organization from a developing country, but all requests must be submitted by the CTCN NDE (national focal point in the concerned country). Once submitted, all requests submitted by developing countries are assessed as per eligibility, balancing and prioritization criteria approved by the CTCN Advisory Board. The three eligibility criteria are the following: 1) The support provided will contribute to increased resilience and/or mitigate emissions, and is aligned with national plans; 2) The support will enhance endogenous capacities; and; 3) Processes are in place in the requesting country to monitor and evaluate any support provided (that is, project accountability is ensured). Balancing criteria are looking at inter and intra-regional a geographical balance (with a preference for requests submitted by Least Developed Countries (LDCs) and other highly vulnerable and low capacity countries; balance between adaptation and mitigation objectives, and balance between various types of support spanning the technology cycle. Prioritization criteria consider a number of elements that demonstrate project strengths and potential for success, including the promotion of endogenous

capacities and appropriate technologies, potential for scale up, for South-South cooperation, for leveraging public and private financing, for creating social, economic and social benefits, promoting gender equality etc.

Once a request is deemed eligible and prioritized, the CTCN selects the best expertise among its consortium partners to develop a response plan. The criteria for selection are: Relevant technical expertise, Experience and network in national context, Relevant language capacity, Response Planning track record, Representative use of the consortium partners in Response Planning and Feedback/ preference from the NDE.

Based on the discussion with the NDE, NDA and request proponent and feedback from the CTCN, the consortium partner develops the response plan. Once an advanced version is prepared, it is presented to the CTCN's director, NDE and NDA for a signature. Once the response plan is signed, the contracting of the Network Member starts. As per the COP mandate and the guidance of the advisory board of the CTCN, it selects the Network Member to implement the activities through a competitive bidding process amongst its registered Network Members, which are over 600 in number. The Network Members are selected provided they meet the membership criteria as defined by the COP decisions and approved by the Advisory Board of the CTCN (https://www.ctc-n.org/network). In the spirit of promoting country ownership, the readiness activities are planned to be performed by local consultants, with the guidance of international experts. The latter will be institutions that have a broad experience in CIS countries. During the tendering process, one of the mandatory criteria for further technical evaluation of bids is that the Network Member demonstrates that they have a local presence either through its own office or a partnership agreement with a local organization/company or consultants. In addition, the bidder has to submit a statement that at least 25% and up to 50% of the budget (dependent on the budget approved by the GCF) is allocated to the local partner. This is to ensure that capacity is built at the local level and, at the same time, international expertise is brought into the country. This encourages creation of partnerships, North -South, South-South and triangular collaborations.

All the members of the network have signed the Code of Conduct as a membership condition. The objective of this Code of Conduct is to ensure that members meet the highest level of professional conduct and ethical standards in supporting the functions of the CTCN defined in paragraph 123 of decision 1/CP.16(COP decision), and that they act in the spirit of international cooperation and with commitment to fostering the development and transfer of environmentally sound technologies to developing country Parties. It applies to all members. The Code of Conduct is guided by two main principles (https://www.ctc-n.org/network/code-conduct):

- Adherence to the Supplier Code of Conduct of the United Nations; and,
- Professionalism and commitment to the principles of technology cooperation as described in the Cancun Agreement (1/CP.16).

The generic qualifications, skills and experience of team members in the Network Members who would be selected to implement the activities are enumerated below:

Expert title	Minim qualification	Necessary experience
	requirements	
Team Leader	Master's degree in science/technology, finance, project management/ climate change adaptation and mitigation/ or another relevant field	Essential minimum 10 years of relevant expertise; expertise in climate change mitigation work with a focus on policy development, project management, high-level negotiations. Familiarity with the UN process, market assessment methodology and policy actions planning Previous experience in the development of Policies working experience in the country highly desired language skills: excellent command of oral and written English
International Experts	At least a master's degree in, science/technology, natural resources	Essential - 15 years' experience of providing technical consultancy services within a developing country, especially within the CIS

Local Experts	management, business, climate change, engineering or another relevant field A formal academic qualification in, science/technology, business, engineering, climate change or another related field	 Experience of developing national plans that involve rigorous assessment of technology options and sectoral analysis at a country or regional level. Demonstrated technical and policy development expertise Familiarity with the UN process, market assessment methodology and policy actions planning Experience of engaging with multiple actors in the development of initiatives aimed at building regional/national capacity within the region Facilitation skills in delivering dedicated training workshops around the policy development process Experience of conducting technology prioritisation and multi-criteria analysis Nexus experience across Energy, Industry and Agriculture sectors, specifically within the CIS region Fluency in the English language. Highly Desirable Understanding of wider policy measures and drivers to overcome barriers to the deployment of technologies and sectors for climate change mitigation and adaptation. Knowledge of enabling environments and stimulus for SME development Local experts required across the prioritized sectors and technology subsectors Essential Experience of developing, facilitating and delivering stakeholder workshops and group facilitating aimed at engaging multiple actors 10 years' experience of appropriate sectors within the country 5 years' experience of policy development within country Demonstrated technical knowledge in the technologies selected. Awareness of the methodology of market assessments and/ or policy actions plans. A formal academic qualification in, science/technology, business, engineering, climate change or other related fields. Fluency in English language Highly Desirable Understanding of wider policy measures and drivers to overcome barriers to the deployment of technologies and
Gender specialist	Master's degree in gender studies or other discipline with focus on the field of gender issues in a developing country context	 Relevant master's degree in Gender studies or other discipline with focus on the field of gender issues in a developing country context At least 7 years working experience with gender mainstreaming issues in a developing country context knowledge and experience of gender mainstreaming in climate change adaptation and mitigation.
Finance Expert	A university degree in accounting, economics or finance	Minimum 8 years of experience in financial mechanisms and procedures, preferably in relation to government work.

	is required and further studies on public service, building or infrastructure finance desirable	 Knowledge and experience in working with government and private sector. Knowledge and experience in designing and implementing loan applications and programmes as well as funding proposals. Ability and willingness to travel at short notice Adequate computer literacy Must be fluent in English.
Communications Expert	A university degree in communications, journalism or other closely related field	At least 7 years professional experience in the field of communications. • Proven expertise in developing and implementing consumer awareness strategies • Excellent organizational skills and attention to detail. • Excellent computer skills using Excel and MS Office Suite. • Must be fluent in English
Project Management Expert	Master's degree in science/technology, finance, project management/ climate change adaptation and mitigation/ or another relevant field	Minimum 10 years of relevant expertise; expertise in managing and implementing policy projects in developing countries. Experience with project design, monitoring and evaluation. Experience with climate change mitigation, sustainable development, community-based projects/interventions. Experience with the UN process and policy actions planning Must be fluent in English -
		Highly Desirable - Working experience in the country - Working experience in Russian

Apart from the individual qualifications and experiences of the proposed team members as mentioned above, the Network Member should demonstrate:

- Proven project management expertise of managing and delivering complicated multi-stakeholder projects involving surveys, data collection, capacity development programs working with national and international organizations;
- Proven expertise of engaging and mobilizing typical stakeholders from private and public sectors to design/implement national policy and regulations;
- Proven relevant experience of market assessments, technical support for policy implementation and financial mechanisms;
- Proven expertise in developing or updating national plans;
- Proven experience of writing technical reports, outreach and communication materials;
- Experience of working in respective country.

The request proponent of this TNA work is the NDA, or the Ministry of Economy. Please note that, in the case of the Kyrgyz Republic, one of the focal points of the NDA is also the NDE to the CTCN.

During the preparation phase of the present Readiness support proposal, national stakeholder consultations were held. They covered the following stakeholders:

Governmental institutions

- Ministry of Economy, Donors Aid Coordination Department and Strategic Planning Department (NDA)
- **Climate Finance Center (NDE)**
- Ministry of Agriculture, Food Industry and Melioration, Agro-industrial Policy Department, Farming and Seed Production Department, International Relations Department, Livestock Department
- Ministry of Emergency Situations, Department of Monitoring and Forecasting of Emergencies, Agency on Hydrometeorology (Kyrgyzhydromet)
- State Committee for Industry, Energy and Subsoil Use, Renewable Energy and Energy Efficiency sectors
- State Agency for Architecture, Construction and Housing and Communal Services, Housing and Communal Services Development and Monitoring Department
- State Agency on Water Resources, Department for the Development of Drinking Water Supply and Sanitation
- National Energy Holding, Strategic Development Department
- 2. Municipal governmental institutions
 - Bishkekvodokanal, Production and Maintenance Department (water supply and water waste management)
 - Bishkek Mayor's Office, Municipal Public Transport Department
- 3. International development partners
 - Embassy of Switzerland (Water sector)
 - EBRD (clean energy)
 - **GIZ** (ecosystem-based adaptation)
 - **UNDP** (energy efficiency and renewable energy)
- 4. Private sector
 - Center for Renewable Energy and Energy Efficiency Development
 - KazEco Group (Energy sector industry, energy efficiency)
 - **RES Association**
 - UNISON Group (Agriculture livestock, energy efficiency, crop production)
- 5. Civil Society/NGO
 - Camp-Ala-Too (agriculture)
 - Community Development and Investment Agency ARIS (agriculture)
 - UNISON NGO (energy efficiency)
- 6. Independent experts
 - Arstan Kadyrov Agriculture Expert
 - Ekaterina Sahvaeva Water Expert
 - Mars Amanaliev Climate change Expert, head of the Ozone Centre, SAEPF
 - Razhab Bayaliev Independent Energy Expert

The implementation team will seek technical and policy advice from TNA Committee / NDA and NDE on a dayto-day basis. Other key stakeholders may include the relevant Ministries such as the Ministry of Agriculture, Energy and the Department dealing with solid waste, etc. The CTCN will engage a consultant for project management activities. The role of this consultant will be to manage the project activities as a Project Manager, which includes GCF reporting, planning for budget and procurement, following up on the timeliness of the deliverables and monitoring key performance indicators.

The CTCN (hosted by UNEP-UNIDO) is providing technical assistance to the Government of Kyrgyzstan, as per its COP Mandate, and supporting Kyrgyz Republic to develop this readiness proposal. The CTCN engagement with the Government of Kyrgyzstan is mature with close co-operation between the NDA and NDE. The implementing partner will be procured through formal tendering procedures if the Readiness proposal is approved for implementation. The relevant COP decisions are provided below for easy reference:

Decision 14/CP.22: Linkages between the Technology Mechanism and the Financial Mechanism of the Convention

Para 4. Welcomes the increased engagement between the Green Climate Fund and the Climate Technology Centre and Network, particularly with respect to utilizing the Readiness and Preparatory Support Programme and the Project Preparation Facility of the fund, noting the potential of such engagement in supporting developing country Parties to build their capacity for implementing technology projects and programmes;

Para 6. Invites Green Climate Fund national designated authorities and focal points to use the support available to them under the Readiness and Preparatory Support Programme to, inter alia, conduct technology needs assessments and develop technology action plans.

Para 7. Also invites developing country Parties to develop and submit technology-related projects, including those resulting from technology needs assessments and from the technical assistance of the Climate Technology Centre and Network, to the operating entities of the Financial Mechanism for implementation, in accordance with their respective policies and processes.

Decision 15/CP.22: Enhancing climate technology development and transfer through the Technology Mechanism

Para 13. Underlines the importance of well-functioning and strengthened collaboration between the national designated authorities for the Green Climate Fund, the focal points for the Global Environment Facility and the national designated entities for technology development and transfer

Para 15. Welcomes the increased engagement between the Green Climate Fund and the Climate Technology Centre and Network, particularly with respect to utilizing the Readiness and Preparatory Support Programme and the Project Preparation Facility of the fund in order to respond to country-driven requests for technical assistance.

Para 16. Encourages the advancement of the engagement referred to in paragraph 15 above, including through the strengthening of collaboration between national designated authorities for the Green Climate Fund and national designated entities for technology development and transfer.

Para 17. Invites the Climate Technology Centre and Network to include the outcomes of the engagement referred to in paragraphs 15 and 16 above in its annual report to the Conference of the Parties at its twentythird session."

The monitoring of the project will be conducted in accordance with the Framework Agreement.

6.3 Risks and mitigation measures

Please include a set of identified risks and mitigation actions for each. Please utilize the risk table below that identifies the probability of a given risk occurring and the entity that will manage the risk. Please refer to Part III Section 6.3 of the Readiness Guidebook for further information on how to complete this section.

Risk category	Specific risk(s) / Risk(s) description	Probability of occurrence (low, medium, high)	Impact level (low, medium, high)	Mitigation action(s)	Entity(ies) responsible to manage the risk(s)
Procurement risk	Delay in implementation of readiness programme	Low	Medium	TNA implementation's management procedures in place. UNEP/ UNIDO will seek Requests for proposals through	UNEP/CTCN

Risk category	Specific risk(s) / Risk(s) description	Probability of occurrence (low, medium, high)	Impact level (low, medium, high)	Mitigation action(s)	Entity(ies) responsible to manage the risk(s)
				a procurement process via the CTCN member organizations	
Political	Delay in Sectoral TNA process due to parliamentary elections to be held in autumn 2020 and presidential elections to be held in fall 2022	High	Medium Sectoral TNA Committee established and includes high level officials committed to disseminating appropriate climate technologies in the country. Stakeholder working groups include influential representatives from the private sector and the civil society highly motivated to take the Sectoral TNA process forward		Sectoral TNA Committee NDA/NDE
Operational	Understaffed governmental entities and low capacity of government officials	Medium	High	Sectoral TNA Committee established and includes high level officials committed to disseminating appropriate climate technologies in the country Capacity building workshops on	Sectoral TNA Committee
Ownership of the results	Ownership by the government and other national stakeholders is weak	Low	High	the Sectoral TNA process Sectoral TNA Committee comprises national governmental representatives well as key stakeholders to drive the Sectoral TNA process and ensure country ownership of the resulting TAP	Sectoral TNA Committee NDA/NDE
Engagement risk	Lack of engagement from key stakeholders	Low	Medium	Dissemination strategy and an organizational targeting to ensure key stakeholders attend and contribute to Sectoral TNA related activities	Sectoral TNA Committee Network Partner
				Engagement of local consultants with local influence, language skills and knowledge of the local context	NDA/NDE
Financial	Opportunity for money laundering, terrorist financing and	Low	Medium	The network member is selected as per the UN procurement rules and remains accountable for the funding received to implement the TNA	Network Partner CTCN/UNEP

Risk category	Specific risk(s) / Risk(s) description	Probability of occurrence (low, medium, high)	Impact level (low, medium, high)	Mitigation action(s)	Entity(ies) responsible to manage the risk(s)
	other prohibited practices			work. There is no direct transfer of money to the government.	
Force majeure	Conflict/ Natural disaster/ Epidemics	Low	High	Alternative working modalities adopted to ensure TNA work's continuity in a safe and suitable manner.	Network Partner CTCN/UNEP
Covid-19 risk	Activities delayed or repeated for inadequate data due to limited face-to- face interaction and travel restrictions	Medium	Medium	The Network Member will engage local consultants with previous experience with relevant local stakeholders to facilitate flow of information. Data collection will be performed adhering to applicable Health &Safety rules in the country at the moment. CTCN will provide tools for remote collaboration and engagement. Unused travel budget may be repurposed to complement remote collaboration tools or additional related costs stemming from Covid-19 situation.	Network Partner CTCN/UNEP

6.4 Monitoring

UNEP-CTCN will ensure that the progress of the planned activities as well as any material issues arising in the implementation are tracked throughout the TNA implementation through the use of project management tools and scheduled calls between the network member, the Climate Finance Center, the office of the NDA/NDE. In addition, quarterly calls will be held between the CTCN, the Climate Finance Center, the NDA and the NDE to discuss main outputs of the TNA Committee meetings. The main issues arising from these meetings will be discussed, fed back to the GCF and if corrective action is needed, they will be communicated to the network member as potential updates. Besides this, UNEP will submit interim progress reports twice annually to the GCF, one for the period January through June and another for the period between July and December, in line with the reporting requirements in the Framework Readiness and Preparatory Support Grant Agreement between UNEP and GCF.

Before the start of the project, the Network Member who will implement the activities will prepare a detailed workplan and a monitoring and evaluation (M&E) plan as per the CTCN procedures. This workplan is used to monitor the timeliness of the activities. The monitoring and evaluation plan must include specific, measurable, achievable, relevant, and time-bound indicators that will be used to monitor and evaluate the timeliness and appropriateness of the implementation. The CTCN Technology Manager responsible for the technical assistance will monitor the timeliness and appropriateness of the work plan and the M&E plan.

Further, all the deliverables are reviewed by the CTCN experts and then passed on to the GCF NDA/NDE and the project proponents for feedback and comments. The deliverable is approved only after all the comments are incorporated by the Network Member. Upon completion of all activities and outputs and as per the CTCN procedures, all the technical assistance implemented by CTCN is subject to monitoring and evaluation and is mapped in the Performance Measurement Framework of the CTCN, which is in alignment with reporting on the implementation of the Technology Framework under Article 10, paragraph 4, of the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC). The data during and after the completion of the project is collected through the well-defined templates as below:

- M&E Plan and Impact Statement Form
- **Technical Assistance Closure Report Template**
- Technical Assistance NDE Feedback Form
- Post-implementation NDE survey
- **Event and Training Reporting Template**
- **Training Evaluation Form**

The results are shared with the NDA/NDE and continuously followed up in terms of progress made towards the implementation of the recommendations of the technical assistance delivered. Upon completion of all activities and outputs, evaluation forms will be completed by the (i) NDE about overall satisfaction level with the technical assistance service provided; (ii) the Lead Implementer about the knowledge and learning gained through delivery of technical assistance; and (iii) the CTCN Director about timeliness and appropriateness of the delivery of the activities and outputs.

6.5 Other Relevant Information

Previous Cooperation

The CTCN (hosted by UNEP-UNIDO) is providing technical assistance to the Government of the Kyrgyz Republic, as per its COP Mandate, and is supporting the Kyrgyz Republic to develop this Readiness support proposal. The relevant COP decisions are provided below for easy reference:

The CTCN Engagement with the Government of the Kyrgyz Republic is mature with close co-operation between the NDA and NDE. The CTCN maintains a close relationship with all its NDEs through its regional meetings and NDE forums. Further UNEP as a host to the CTCN has been engaged in a number of projects with the State Agency on Environment Protection and Forestry through its Regional office of Asia and the Pacific, Bangkok, Thailand (before 2013) and now through its sub regional office for Central Asia based in Almaty.

The CTCN is supporting the government of the Kyrgyz Republic in the following technical assistance related activities:

Sustainability and Exit Strategy

The project inherently builds sustainability at the national and regional levels by providing guidance and tools. A substantial part of the project activities will consist in building local capacity of key stakeholders who bear the responsibility of managing the program in the long term. Project sustainability will be monitored by the CTCN after the project is implemented (with support from the GCF). This will be reported to UNFCCC and UNEP via reporting procedures in place dedicated to activities. A capturing of lessons learned and knowledge management will be fulfilled through the CTCN online Knowledge portal.

Among the outputs of this proposal, the development of concept notes will ensure implementation of the TAP. Concept notes thus create a quality potential project pipeline that can be further developed into proposals for GCF financing. The TAP and the technology portal created can be implemented by the office of the NDA, including the CFC. The proposal recognizes the important role of the private sector in advancing climate action in the country. The proposal has hence included a capacity building component for the private sector to enhance their capacity and knowledge to engage in climate change. This is expected to enhance perennity of this work.

The complete TNA process is capacity building focused. The TNA Committee is a defined body, however capacity building will cover various stakeholders who took part to workshops and other capacity building activities. Moreover, as per the CTCN procedures, the Network Member selected to implement the activities will have a local partner so that the knowledge and skill sets developed remain within the country. This local partner will continue to serve the needs and requirements of the country in the future.

The CTCN will not have any role in the selecting an Accredited Entity who will submit the concept notes because of conflict of interest issues. However, the CTCN will in its advisory role provide feedback to the NDA on reaching out to the Accredited Entities for submission of the concept notes prepared in the frame of the Activity 4.1.1.

Accredited Entity Statement on Conflict of Interest

To avoid any possible conflicts of interest deriving from the delivery partner's role as an accredited entity, the prioritization of investments and projects in the context of this readiness grant will be made through a broad consultation process with relevant stakeholders, including other potential implementing entities. The final validation of these priorities will be carried out through the countries' own relevant coordination mechanism and institutional arrangements, with the participation of other government agencies, as well as representatives from civil society and private sector as the NDA deems relevant, to ensure chosen priorities are fully aligned with national plans and strategies and adequately includes inputs from consulted stakeholders.

Whistle Blower Protection

Further, UNEP being part of the UN Secretariat, it adheres to the United Nations Ethics Office prescribed Whistle Blower Protection by the Secretariat's ST/SGB/2005/21.5 The Ethics Office has the authority to take preventive action against potential repercussions the whistle blower may receive. 6_7

By providing protection for staff who may otherwise be reluctant to come forward, the UN learns about and is able to respond to misconduct. This strengthens accountability and maintains the integrity of its operations and programmes.

Protection against retaliation applies to all staff members, interns and UN volunteers. Punishing consultants who report violations of UN rules and regulations is also prohibited.

UNEP will comply with its obligations under the Framework Agreement for Readiness and Preparatory Support, including applying the UNEP Environmental and Social Sustainability Framework. UNEP has already provided information on its Grievance Redress Mechanism through the accreditation process. For more information, please refer to https://www.unenvironment.org/resources/report/uneps-environmental-social-and-economicsustainability-stakeholder-response. Please note that the UNEP website provides a direct link for stakeholders to report project concerns.

To date, there 30 United Nations Security Council (UNSC) restrictive measures in place with none enforced within Kyrgyz Republic. https://www.un.org/securitycouncil/sanctions/information.

AML/CFT and "know your customer'

UNEP will comply with its obligations under the Framework Agreement for Readiness and Preparatory Support, including applying UN fiduciary principles and standards relating to any "know your customer' checks, AML/CFT and financial sanctions imposed by the United Nations Security Council, which should enable UNEP to comply with the Policy on Prohibited Practices and the principles of the AML/CFT Policy. UNEPs screening processes for prohibited practices and money laundering have been shared with the GCF Secretariat through the accreditation process. More information on UNEPs Misconduct and Anti-fraud Policies is available at https://www.unenvironment.org/about-un-environment-programme/policies-and-strategies/misconduct-andanti-fraud-policies.

⁵ Annan, Kofi (19 December 2005). "Secretary-General's Bulletin - Protection against retaliation for reporting misconduct and for cooperating with duly authorized audits or investigations". undocs.org. United Nations. ST/SGB/2005/21. Retrieved 24 March 2017.

⁶ "The UN Ethics Office promotes an ethical organizational culture based on our shared values of integrity, accountability, transparency and respect. It is independent, impartial, confidential and professional". www.un.org. Retrieved 2017-08-10. ⁷ "The UN Ethics Office promotes an ethical organizational culture based on our shared values of integrity, accountability, transparency and respect. It is independent, impartial, confidential and professional". www.un.org.

Annex 1. Acronyms

BAU Business As Usual

CAREC Central Asia Regional Economic Cooperation

CCGEDCC Coordination Council on Green Economy Development and Climate Change

CFC Climate Finance Centre

CIF PPCR Climate Investment Funds' Pilot Programme for Climate Resilience

CIP Climate Investment Programme

CN Concept Notes

CNG Compressed Natural Gas
COP Conference of the Parties

CS-FOR Carbon Sequestration through Climate Investment in Forests and Rangelands

CTCN Climate Technology Centre and Network

EBRD European Bank for Reconstruction and Development

EE Energy Efficiency

EurAsEC Eurasian Economic Community
FAO Food and Agriculture Organization

GCF Green Climate Fund
GHG Greenhouse Gases
HPP Hydropower Plants

INDC Intended Nationally Determined Contribution

LDCs Least Developed Countries
MCA Multi Criteria Analysis

M&E Monitoring and Evaluation
NAP National Adaptation Plan

NAPA National Adaptation Programme of Action

NDA National Designated Authorities
NDC Nationally Determined Contribution
NDE Nationally Designated Entity
PPF Project Preparation Facility

RE Renewable Energy

SDGs Sustainable Development Goals

TAP Technology Action Plan

TNA Technology Needs Assessment

UN United Nations

UNDP United Nations Development Programme
UNEP United Nations Environment Programme

UNFCCC United Nations Framework Convention on Climate Change UNIDO United Nations Industrial Development Organization

WFP World Food Program

READINESS & PREPARATORY SUPPORT



BUDGET, PROCUREMENT & IMPLEMENTATION PLAN

Readiness Grant Budget Preparation Guidelines

This file contains three specific planning tools to complete the supplementary information required when submitting a proposal for Readiness Programme support (including for NAP/adaptation planning):

- Budget plan and accompany Budget notes
- Procurement plan
- Implementation plan

The following considerations are important when completing the budget:

- 1. Before preparing the Readiness and budget, procurement, and implementation plans, please read the full guidance contained in the Readiness Programme Guidebook, specifically Part III Section 5
- 2. You can select the appropriate budget categories from the dropdown list in the budget plan:
- 3. To insert additional rows, right click on the row number below where you wish to insert the new row and choose INSERT.
- 4. Additional budget categories may be added by manually typing them on the Budget Category sheet. :
- 5. The Budget Notes sheet should be used to record explanations, further details or cost breakdowns for individual lines

Professional Services - Companies /Fi Gonsultant - Individual - International Consultant - Individual - International Travel - International

Project Management Cost:

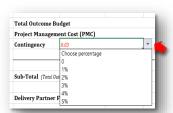
Project management costs (PMC) are the direct administrative costs incurred to execute a project. They should cover only incremental costs incurred due to the GCF contribution. In most cases, these costs are directly related to the support of a dedicated project management unit which manages the day to day execution related activities of the project.

General Principles for PMC costs:

- 1. The percentage of PMC financed by GCF should not be more than the percentage share of the overall budget financed by GCF
- 2. PMC budget thresholds: Up to 7.5 per cent of total activity budget.
 - > PMC exceeding 7.5 per cent for the readiness (including NAPs) proposals, and PPF proposals, up to \$ 3 million will require detailed documentation and justification supporting the entire PMC budget.
 - > The PMC should be shown as a separate component in the project budget. A detailed breakdown of PMC should be provided by budget category.
 - > Indicative list of eligible project management costs:
 - > Project staffing and consultants: Project manager, Project Assistant, Procurement personnel, Finance personnel & Support/admin. Personnel
 - > Other direct costs: Office equipment, Mission related travel cost of the PMU, Project management systems and information technology, Office supplies, Audit cost

Contingency:

- 1. Select the appropriate % of Contingency Budget from the dropdown list :
- 2. Contingency budget for unforeseen costs arising during the project implementation should not be included in the outcome budget separately.
- 3. Contingency budget must be used for any unforeseen programme (output level) cost that is unrelated to implementation/service fee.
- Any use of contingency must be reported to and agreed by the GCF Secretariat in writing in advance provided with justifications that are acceptable to the GCF
- 5. If by the end of the grant implementation period, you have not spent Contingency, you may not increase the scope of the project or make any other expenditures using the Contingency.



Budget Categories
Audio Visual & Printing
Audit Fee
Consultant - Individual - International
Consultant - Individual - Local
Professional Services – Companies/Firm
IT Equipment
Office Supplies
Travel - International
Travel – Local
Workshop/Training
TNA Committee Meetings

Indicate additional budget categories

Please add rows for Outcomes, Outputs and Cost Categories as required. Additional budget categories may be added by manually typing them on the Budget Category sheet.

				Detailed Budget (in US\$)			Total Budget	Expenditure Plan												
Outcomes	Outputs	Activities	Sub-Activities	Budget Categories choose from the drop-down list	Unit	# of Unit	Unit Cost	Total Budget (per budget category)	Total Budget (per sub-outcome)	Total Budget (per outcome)	6m	12m	18m	24m	30m	36m	Budget notes			
Outcome 1.3 Relevant country stakeholders	Output 1.3.1 Coordination mechanism for the	Activity 1.3.1 Institutionalize a coordination	1.3.1a Establish a Sectoral TNA Committee	Consultant - Individual - Local	W/Month	18	1,000.00	18,000.00									А			
(which may include executing	implementation of the Sectoral TNA			Consultant - Individual - Local	W/Day	44	200.00	8,800.00									В			
entities, civil society organizations and private	established and capacity among stakeholders on the TNA process	Sectoral TNA		Office supplies	Lumpsum	1	3,000.00	3,000.00									С			
sector) have established	increased			IT equipment	Lumpsum	1	2,400.00	2,400.00									D			
adequate capacity, systems,				TNA Committee Meetings	Quarterly meeting	6	500.00	3,000.00									E			
and networks to support the planning, programming, and				Travel - Local	Trip	6	300.00	1,800.00									G			
implementation of GCF-funded activities			1.3.1b Map stakeholders and establish stakeholder working groups to actively contribute to the Sectoral TNA process	Consultant - Individual - International	W/Day	50	500.00	25,000.00	123,600.00	123,600.00	123,600.00						н			
				Consultant - Individual - Local	W/Day	70	200.00	14,000.00	,	120,000	,						1			
				Travel – Local	Trip	60	200.00	12,000.00									J			
			1.3.1c Capacity building workshops	Consultant - Individual - International	W/Day	15	500.00	7,500.00									К			
			workanopa	Consultant - Individual - Local	W/Day	20	200.00	4,000.00									L			
				Workshop/Training	W/Day	3	1,500.00	4,500.00									М			
				Travel - International	Trip	3	2,200.00	6,600.00									N			
			1.3.1d Develop a work plan for the	Travel – Local	Trip	10	400.00	4,000.00									0 P			
			Implementor, the stakeholder working groups and the TNA Committee	Consultant - Individual - International Consultant - Individual - Local	W/Day W/Day	10	200.00	5,000.00 4,000.00									Q			
Outcome 2.2	Output 2.2.1	Activity 2.2.1	2.2.1a Select sub-sectors for the Kyrgyz Republic Sectoral TNA	Consultant - Individual - International	W/Day	15	500.00	7,500.00			12,500.00						R			
GCF recipient countries have developed or enhanced strategi	Technology Needs Assessment ic (TNA) report developed covering 4	Identify and prioritize appropriate climate		Consultant - Individual - Local	W/Day	25	200.00	5,000.00									S			
frameworks to address policy	sectors: agriculture, energy, water	technologies to introduce and disseminate in the Kyrgyz Republic	technologies to introduce and	echnologies to introduce and	2.2.1b Select appropriate	Consultant - Individual - International	W/Day	25	500.00	12,500.00	52,200.00								Т	
gaps, improve sectoral expertise, and enhance enabling	resources and solid waste management		adaptation and mitigation technologies	Consultant - Individual - Local	W/Day	80	200.00	16,000.00	52,200.00								U			
environments for GCF	management	Nepublic	Ť	Workshop	W/Day	4	1,500.00	6,000.00				39,700.00					V			
programming in low emission				Travel - International	Trip	1	2,200.00	2,200.00									W			
investment				Travel – Local	Trip	10	300.00	3,000.00									Х			
	Output 2.2.2.	Activity 2.2.2	2.2.2a Analyze barriers that prevent appropriate adaptation and	Consultant - Individual - International	W/Day	15	500.00	7,500.00									Υ			
	Technology Action Plan (TAP)	Develop and validate a	mitigation technologies from being	Consultant - Individual - Local	W/Day	30	200.00	6,000.00									Z			
	developed and presenting a time	Technology Action Plan	introduced and/or disseminated in the Kyrgyz Republic	Workshop/Training	W/Day	2	1,500.00	3,000.00				21,700.00					AA			
	bound framework to address existing policy gaps to enable a		and right gyz ricopublic	Travel - International	Trip	1	2,200.00	2,200.00									AB			
	more favorable environment for			Travel – Local	Trip	10	300.00	3,000.00	74 400 00								AC			
	low carbon and climate adaptation appropriate technology			Consultant - Individual - International	W/Day	45	500.00	22,500.00	74,400.00	258,000.00						AD				
	investments in the country					2.2.2b Develop and validate a	Consultant - Individual - Local	W/Day	105	200.00	21,000.00 3,000.00									AE AF
			Technology Action Plan to introduce and disseminate the	Workshop/Training	W/Day	2	1,500.00 2,200.00	2,200.00					52,700.00				AF AG			
			selected technologies	Travel - International	Trip	10	300.00	3,000.00					-				AH			
				Travel – Local Audio Visual & Printing	Trip	10	1,000.00	1,000.00	+				-				Al			
Outcome 2.4		Activity 2.4.1 Empower the	2.4.1a Elaborate a roadmap	Consultant - Individual - International	W/Day	20	500.00	10.000.00									AJ			
Strategies for transforming and	Output 2.4.1	private sector stakeholders to	·	Consultant - Individual - International	W/Day	120	200.00	24,000.00				-					AK			
attracting private sector investment for low emissions	Feasible measures to support	deploy climate technologies	2.4.1b Foster a local technology	Consultant - Individual - International	W/Day	50	500.00	25.000.00				109,000.00					AL			
and resilience developed and	deployment of climate technologies	S	market development by supporting the use of local resources	Consultant - Individual - Local	W/Day	150	200.00	30,000.00	†			100,000.00					AM			
being used	by the private sector are identified, local technology market potential is	S	the use of local resources	Professional Services –	W/Day	100	200.00	20.000.00	131,400.00								AN			
	assessed, an open access		2.4.4- 04	Companies/Firm	W/Day	4	1,500.00	-,												
	technology portal is operational and private sector's stakeholders		2.4.1c Strengthen capacity of private sector stakeholder	Workshop/Training Travel - International	Trip	2	2,200.00	6,000.00 4,400.00					22,400.00				AO AP			
	trained in utilizing the portal.		representatives	Travel - International Travel - Local	Trip	40	300.00	12,000.00	+				22,400.00				AQ			
Outcome 4.1	Output 4.1.1	Activity 4.3.1		Consultant - Individual - International	W/Day	45	500.00	22,500.00					36,300.00				AR			
An increase in the number of quality project concept notes developed and submitted	3 concept notes prepared in line with the GCF guidelines and submitted to the GCF	Develop 3 project concept note to submit to the GCF	S	Consultant - Individual - Local	W/Day	69	200.00	13,800.00	36,300.00	36,300.00			30,300.00				AS			
Total Outcome Budget										417,900.00	136,100.00	170,400.00	111,400.00		-	-				
				Consultant - Individual - International	W/Day	52	500.00	26,000.00	Actual amount and % of	Maximum PMC that	121,121.00	112,122,00	,				AT			
Project Management Cost (I	Project Management Cost (PMC)				Lumpsum	1	2,500.00	2,500.00	PMC requested:	can be requested:							AU			
Up to 7.5% of Total Activity Budge				Travel - International	Trip	1	1,200.00	1,200.00	do not change the formula	do not change the formula							AV			
					ļ			-	29,700.00	31,342.50										
								-	7.11%	7.50%										

FOR GREEN CLIMATE FUND SECRETARIAT'S USE ONLY

Breakdown (per budget category)	Total (per budget category)
Audio Visual & Printing	1,000.00

Consultant - Individual - International	145,000.00
Consultant - Individual - Local	164,600.00
Professional Services – Companies/Firm	20,000.00
IT Equipment	2,400.00
Office Supplies	3,000.00
Travel - International	17,600.00
Travel – Local	38,800.00
Workshop/Training	22,500.00
0	3,000.00
0	
0	-
Total Outcome Budget	417,900.00
Total Outcome Budget + PMC	447,600.00

145,000.00	l			
164,600.00]	Total Outcome Budget		417,900
20,000.00		Project Management Cost (PMC)	7.1% requested	29,700
2,400.00]	Contingency	1% requested	4,179
3,000.00				
17,600.00				
38,800.00]	Sub-Total (Total Outcome Budget + Contingency	+ PMC)	451,779.
22,500.00				
3,000.00		Delivery Partner Fee (DP) - Up to 8.5%	of the Sub-Total	38,401
]			
-		Total Project Budget (Total Activity Budget +	Contingency + PMC + DP)	\$ 490,181.
417,900.00]			
447,600.00				
0	-			

Budget Note	Detailed Description						
А	Individual local consultant charges \$1000 per month. Consultant will coordinate and monitor the project implementation process at the national level to enable multi-sectoral and structured engagement. In addition, the consultant will facilitate the establishment of the Sectoral TNA Committee and develop its work plan together with the second local consultant. He will be in charge of ensuring an inclusive stakeholder engagement (especially vulnerable groups) and ensure that the project implementation by the national and international consultants is delivered with the highest level of impact and best value for money - consultant will be hired for the duration of the TNA process -18 months.						
В	Local individual consultant charges at \$200 per day. Includes preparing 6 quarterly Sectoral TNA Committee meeting agendas and reports, and convening, attending and preparing 6 quarterly Sectoral TNA Committee meetings (4 days per meeting, hence 24 days). In addition, the consultant will facilitate the establishment of the Sectoral TNA Committee and develop its work plan together with the international consultant.						
С	Office supplies lumpsum of 3,000 will cater for any office supplies needs during the entire project implementation phase (stationaries, phone						
D	etc) Includes purchase of IT equipment such as laptops and internet services						
E	Cost of renting a space to host the quarterly Sectoral TNA Committee and working groups meetings @ 500USD per meeting						
F							
G	Foresees up to 6 stakeholders attending each quarterly meeting from outside Bishkek, at a lumpsum of \$300 per trip (\$150 per day plus \$150 per return trip)						
Н	Includes preparing 6 quarterly Sectoral TNA Committee meeting and 6 quarterly 4 working groups' meeting agendas and reports (4 days per a quarterly set of meetings hence 24 days) and attending at least 4 sets of meetings (4 days for each quarterly meeting of the 4 working groups, hence 16 days) in addition to identifying stakeholders, assisting the formation of the sectoral working groups and developing an action plan for each group together with the national consultant (10 days). In addition, the consultant will facilitate the establishment of the Sectoral TNA Committee and develop its work plan together with the national consultant.						
1	Includes preparing and convening 6 quarterly 4 working groups' meeting agendas and reports (10 days per quarterly set of meetings hence 60 days), attending the meetings (4 days for each quarterly meeting of the 4 working groups, hence 26 days) in addition to identifying stakeholders, assisting the formation of the sectoral working groups and developing an action plan for each group together with the international consultant (14 days).						
J	Foresees up to 60 stakeholders attending each quarterly meeting from outside Bishkek, at a lumpsum of \$200 per trip (\$100 per day plus \$100 per return trip)						
К	Includes preparing content, materials and agenda for each workshop, and preparing one completion report per workshop. Includes one travel of the international consultant to deliver the workshop together with the national consultant						
L	Includes preparing content, materials and agenda for each workshop, and preparing one completion report together with the international consultant.						
М	The cost of hosting one workshop is estimated at \$1,500 per day. It includes a one day workshop for the Sectoral TNA Committee and a two day workshop for the 4 stakeholder groups						
N	Cost of one trip of the international consultant includes a return flight fare at \$1,000 and 6 DSAs (five working days in Bishkek) at \$200, hence \$2,200 per trip						
0	Foresees up to 10 participants attending the 3 days training in Bishkek, at a lumpsum of \$400 per trip (\$100 per day plus \$100 per return trip)						
Р	Requires 10 working days of the international consultant						
Q	Requires 20 working days of the national consultant						
R	Work of the international consultant will consist in doing the background research work and preparing analytical drafts based on guidance from the working groups together with the national consultant						
S	Work of the national consultant will consist in doing the background research work and preparing analytical drafts based on guidance from the working groups under the guidance of the international consultant						

T	Work of the international consultant will consist in doing the background research work and preparing analytical drafts based on guidance from the working groups together with the national consultant
	Work of the national consultant will consist in doing the background research work and preparing analytical drafts based on guidance from the
U	working groups under the guidance of the international consultant
V	A 4 day workshop will need to be conducated for stakeholder groups to select appropriate adaptation and mitigation technologies. The cost of
•	hosting a workshop is estimated at \$1,500 per day.
W	Cost of one trip of the international consultant includes a return flight fare at \$1,000 and 6 DSAs (five working days in Bishkek) at \$200, hence \$2,200 per trip
х	Foresees up to 10 stakeholders attending the 2 day workshop at a lumpsum of \$300 per trip (\$100 per day plus \$100 per return trip). Since the workshop will partly be condicted separately for each of the 4 stakeholder groups, it is anticipated that one stakeholder will not taake part to the workshop for longer than 2 days.
Υ	Work of the international consultant will consist in doing the background research work and preparing analytical drafts based on guidance from the working groups together with the national consultant
Z	Work of the national consultant will consist in doing the background research work and preparing analytical drafts based on guidance from the working groups under the guidance of the international consultant
AA	The cost of hosting one workshop is estimated at \$1,500 per day. It includes a 2 day workshop.
AB	Cost of one trip of the international consultant includes a return flight fare at \$1,000 and 6 DSAs (five working days in Bishkek) at \$200, hence \$2,200 per trip
AC	Foresees up to 10 stakeholders attending the 2 day workshop at a lumpsum of \$300 per trip (\$100 per day plus \$100 per return trip).
AD	The international consultant will facilitate the process of preparing, convening, conducting the validation workshop, reflect suggested changes and finalise the TAP draft together with the national consultant.
AE	The national consultant will facilitate the process of preparing, convening, conducting the validation workshop, reflect suggested changes and finalise the TAP draft under the guidance of the international consultant.
AF	Validation of the TAP will take place at a dedicated 2 days workshop.
AG	Cost of one trip of the international consultant includes a return flight fare at \$1,000 and 6 DSAs (five working days in Bishkek) at \$200, hence \$2,200 per trip
AH	Foresees up to 10 stakeholders attending the 2 day workshop at a lumpsum of \$300 per trip (\$100 per day plus \$100 per return trip).
Al	Audio Visual & Printing lumpsum cost of \$1,000 to cater for the development of TAP implementation related communication materials
AJ	Requires 20 working days of the international consultant
AK	Requires 120 working days of the national consultant
AL	Requires 50 working days of the international consultant to implement 1.3.2b and 1.3.2c
AM	Requires 150 working days of the national consultant to implement 1.3.2b and 1.3.2c
AN	Fees of a specialised IT firm to create an open access technology portal and maintain it for the duration of the TNA work
AO	The cost of hosting one workshop is estimated at \$1,500 per day. The activity anticipates 2 workshops of 2 days each.
AU	Includes 2 travels of the international consultant to facilitate the two workshops. Cost of one trip includes a return flight fare at \$1,000 and 6
AP	DSAs (five working days in Bishkek) at \$200, hence \$2,200 per trip. A few additional working days in Bishkek have been added per trip so that the international consultant can closely work with the national consultant and conduct meetings wih relevant local stakeholders.
AQ	Foresees up to 40 participants attending the 2 days capacity building workshop in Bishkek, at a lumpsum of \$200 per trip (\$100 per day plus \$100 per return trip)
AR	The international consultant will work on preparing 3 concept notes, dedicating 15 working days per concept note, with the assistance of the national consultant.
AS	The national consultant will work on preparing 3 concept notes, dedicating 23 working days per concept note, with under the guidance of the international consultant.
AT	This is the cost of a consultant to CTCN who will support the CTCN Regional Manager in the management of the TNA work
	This is the cost of a financial audit to be done and submitted by the network partner to UNEP after the complation of the project
AU	This is the cost of a illiancial addit to be done and submitted by the network partner to other after the complation of the project

5.2 Procurement Plan

For goods, services, and consultancies to be procured, please list the items, descriptions in relation to the activities in Section 3, estimated cost, procurement method, relevant threshold, and the estimated dates. Please include the procurement plan for at least the first tranche of disbursement requested below and provide a full procurement plan for the entire duration of the implementation period if available at this stage.

Item	Item Description	Estimated Cost (US\$)	Procurement Method	Thresholds (Min-Max monetary value for which indicated procurement method must be used)	Estimated Start Date	Projected Contracting Date
Goods and Non-Consulting Se	ervices					
Sub-Total (US\$)		\$ -				
Consultancy Services		_				
	t to Conduct a Sectoral Technology nology Action Plan for The Kyrgyz		As per the UNEP-CTCN procedures detailed below and in the proposal	As per the UNEP-CTCN procedures detailed below and in the proposal	1-Jan-2021	1-Jun-2021
Sub-	-Total (US\$)	\$ 420,400.00				

Estimated cost equivalent to total outcome budget + audit fee

Overall financial management and procurement of goods and services under this readiness and preparatory support proposal will be guided by UN regulations,

UNEP will be responsible for the implementation of the readiness activities and for procurement and contractual services, as well as reporting on the progress CTCN procedure for procurement: For a request that is eligible and prioritized, the Climate Technology Managers in charge of the respective request sources

Overall financial management and procurement of goods and services under this readiness and preparatory support proposal will be guided by UN regulations, rules, policies and procedures.

UNEP will be responsible for the implementation of the readiness activities and for procurement and contractual services, as well as reporting on the progress of this implementation in close coordination and strategic guidance from the NDA/FP. The procurement actions and the operational services will be carried forward in accordance with UN policies and procurement guidelines.

The selection of the institution from the Network of CTCN for the execution of the technical assistance is conducted through a competitive procurement process as per UN Rules and Regulations, in line with CTCN procedures and with UN Rules and Regulations. The CTCN nurtures a Network of more than 550 expert organizations in the field of low-carbon and climate resilient technologies. The required expertise to carry out the activities that define this intervention will be sourced from the Network. For this, the following four principles shall be given due consideration when undertaking the procurement functions of UNEP:

Please list all the deliverables (e.g. D.1.1.1a) per activity (e.g. A1.1.1) with the identifier and mark the planned duration as show in the example. Please also indicate milestones for any deliverables to be completed during the implementation period of the activity in question.

Make sure the identifier number of each activity and deliverable matches with the proposal as this table does not require its name or description. Please refrain from adding descriptions.

this tables, please see Part III Section 5 of the Readiness Guidebook

Milestone (deliverable) Target completion date Planned duration CONTRACTING **Estimated Timeline Activities & Deliverables** Mi Mii Miii Miv Mv M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 M11 M12 M13 M14 M15 M16 M17 M18 Reporting Activity Sub- Activity Deliverables Deliverable 1.3.1a (i) List of CCGEDCC members taking part to the Sectoral TNA Committee Activity 1.3.1a Establish a Sectoral TNA Deliverable 1.3.1a (ii) Sectoral TNA Committee guidelines clarifying responsibilities and work processes to support the TNA process Deliverable 1.3.1a (iii) Sectoral TNA Committee work plan Deliverable 1.3.1a (iv) Quarterly reports of the Sectoral TNA Committee meetings Deliverable 1.3.1.b (i) Stakeholder mapping report, where roles and responsibilities are specified, and an Activity 1.3.1 Activity 1.3.1b Map stakeholders and nstitutionalize a exhaustive list of stakeholders is provided (including those who were not retained to be part of establish stakeholder working groups to stakeholder groups) coordination mechanism to actively contribute to the Sectoral TNA mplement the Sectoral Deliverable 1.3.1.b (ii) Workplan for each stakeholder working group TNA Deliverable 1.3.1.b (iii) Stakeholder working groups' meeting reports Deliverable 1.3.1c (i) Workshop reports (including list of participants, photo and other relevant documentation) Activity 1.3.1c Capacity building workshops Deliverable 1.3.1c (ii) Pre and post training surveys to assess the impact of the training sessions completed Deliverable 1.3.1d (i) An overarching workplan of activities for the Implementor, the stakeholder working Activity 1.3.1d Develop a work plan for the groups and the TNA Committee to implement the Sectoral TNA activities under the present Readiness Implementor, the stakeholder working groups and the TNA Committee to Deliverable 1.3.1d (ii) 4 sector specific workplans of activities for the Implementor to implement with mplement the Sectoral TNA activities unde inputs from the each relevant stakeholder working group under the overarching coordination of the the present Readiness support Sectoral TNA Committee Activity 2.2.1a Select sub-sectors for the Deliverable 2.2.1a (i) Report on identified priority sub-sectors justifying why these have been selected in Kyrgyz Republic Sectoral TNA line with national priorities and the country's international climate commitments Activity 2.2.1 Identify and prioritize appropriate limate technologies to Deliverable 2.2.1b (i) Sectoral TNA report summarizing all processes and outcomes of the Activity 2.2.1b ntroduce and disseminate includina: in the Kyrgyz Republic Activity 2.2.1b Select appropriate -Technology fact sheets adaptation and mitigation technologies -Set of criteria for MCA exercise, detailing criteria tree and performance matrix -Decision-making meeting report (including a full list of participants and photo documentation -Selected and validated priority technologies Activity 2.2.2a Analyze barriers that prevent appropriate adaptation and Deliverable 2.2.2a - Barrier analysis report, detailing barriers preventing selected technologies from mitigation technologies from being being introduced and/or disseminated in the Kyrgyz Republic, and measures to address them introduced and/or disseminated in the Activity 2.2.2 Develop and Kyrgyz Republic validate a Technology Deliverable 2.2.2b (i) Technology Action Plan (TAP) report validated by the national stakeholders Action Plan Activity 2.2.2b Develop and validate a Deliverable 2.2.2b (ii) National consultation workshop report Technology Action Plan to introduce and disseminate the selected technologies Deliverable 2.2.2b (iii) List of most relevant project ideas within the TAP to be transformed into Concept

Activity 2.4.1 Empower the private sector stakeholders to deploy climate technologies	Activity 2.4.1a Elaborate a roadmap	Deliverable 2.4.1a (i) Road map listing identified feasible actions to utilize, produce and mainstream climate technologies into the private sector's operations									X							
		Deliverable 1.3.2b (i) Assessment report on specific sub-sectors and technologies with the highest local economy formation potential											X					
		Deliverable 1.3.2b (ii) Recommendations on which financial and incubator mechanism/s would best to catalyze growth of local startups in developing climate change and local context sensitive technology solutions for the country													X			
	Activity 2.4.1c Strengthen capacity of private sector stakeholder representatives	Deliverable 1.3.2c (i) Open access technology portal developed and maintained															\sim	
		Deliverable 1.3.2c (ii) Training and training of trainers packages developed																
		Deliverable 1.3.2c (iii) Pre-and post-training surveys to assess the impact of the training sessions completed																
		Deliverable 1.3.2d (iv) Training report																\times
	Activity 4.1.1 Develop 3 project concept notes to submit to the GCF	Deliverable 4.3.1 (i) Report on project ideas considered, prioritized and selected														X		
		Deliverable 4.3.1 (ii) 3 Concept notes developed																X
					1	2	3 4	4 5	6	7	8 9	#	# #	#	#	#	# #	# t #