

REQUEST FOR CEO ENDORSEMENT¹

PROJECT TYPE: Medium-sized Project **TYPE OF TRUST FUND:** GEF Trust Fund

PART I: PROJECT INFORMATION

Project Title: Reducing global and local environmental risks from primary mercury mining in Khaidarkan, the Kyrgyz Republic						
Country(ies):	Kyrgyz Republic	GEF Project ID:2	4985			
GEF Agency(ies):	UNEP	GEF Agency Project ID:	00868			
Other Executing Partner(s):	State Agency for Environmental Protection and Forestry	Submission Date:	10-07-2012			
GEF Focal Area (s):	Persistent Organic Pollutants	Project Duration(Months)	36			
Name of Parent Program (if applicable): For SFM/REDD+		Agency Fee (\$):	94,400			

A. FOCAL AREA STRATEGY FRAMEWORK³

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co- financing (\$)
CHEM-3 Pilot sound chemicals management and mercury reduction	Outcome 3.1 Country capacity built to effectively manage mercury in priority sectors. Outcome 3.2. Contribute to the overall objective of the SAICM of achieving the sound management of chemicals throughout their life-cycle in ways that lead to the minimization of significant adverse effect on human health and the environment.	Development and implementation of management plans for persistent toxic substances and other chemicals of global concern, in particulat with respect to mercury, on a pilot basis	GEF TF	864,000	2,818,000
		Subtotal	GEF TF	864,000	2,818,000
	Project management cost ⁴			80,000	189,000
	944,000	3,007,000			

B. PROJECT FRAMEWORK

 $^{^{\}rm 1}$ It is important to consult the GEF Preparation Guidelines when completing this template

² Project ID number will be assigned by GEFSEC.

³ Refer to the <u>Focal Area/LDCF/SCCF Results Framework</u> when filling up the table in item A.

⁴ GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

Project Objective: to enable socially compatible economic transition of the Khaidarkan community from primary mercury mining to more environmentally and socially sound economic activities

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Co- financing (\$)
Component 1: Identification and implem- entation of local economic opportunities, not reliant on mercury mining	ТА	Community reliance on mercury mining reduced through identification of alternative diversified employment opportunities	National plans and strategies supporting mercury management for alternative employment opportunities including: a. socio-economic analysis, environmental impact assessment and roadmap for the implementtation of <i>mining alternatives</i> to mercury mining b. identification of priority alternatives for <i>non-mining</i> economic activities c. UNDP facilitation of the diversification of Khaidarkan's eco-nomy, including the promotion of small scale economic activities	GEF TF	250,000	1,123,000
Component 2: Assessment and monitoring of environment and health impacts from primary mercury mining and pollution	ТА	Impacts of mercury mining evaluated through enhanced human health and environment monitoring	Capacity built through training of laboratory staff (4 laboratories and 10 experts) and intercalibration studies Qualitative and quantitative assessment of environmental and health risks and impacts in the primary mercury mining area available. Low cost and easy-to-use monitoring and emergency response system installed and capacity to collect and disseminate environment and health risk information available	GEF TF	155,000	495,500
Component 3: Explore and prepare remedial and risk prevention measures for mercury-contaminated sites	ТА	Reduced risk exposure from mercury contaminated sites through remedial and risk prevention measures	Remediations targets and priorities identified Workshops and training on mercury remediation. Strategy and guidelines for remediation of highly mercury contaminated areas prepared and highlights reduction of mercury emissions into the local and global environment and also reflected in decontamination report	GEF TF	258,000	640,500
Component 4: Awareness rising at national and community level and public transparency	ТА	Enhanced governance through awareness raising and stakeholders' participation on the transition to mercury mine alternatives	Awareness raising and training programme designed and implemented Awareness of alternative employment opportunities to mercury mining addressed to mercury mine managers and decision making class Social impacts of alternatives to mercury mining prepared	GEF TF	120,000	475,000
			Subtotal		783,000	2,734,000
			Project management Cost*5	GEF TF	80,000	189,000
			Monitoring and Evaluation	GEF TF	81,000	84,000
			Total project costs		944,000	3,007,000

C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

⁵ Same as footnote #4. see project component 1

Sources of Co-financing	Name of Co-financier (source)	Type of Co- financing	Co-financing Amount (\$)
National Government	State Agency for Environmental Protection and Forestry	In-kind	100,000
Bilateral Aid Agency (ies)	Swiss Federal Office for the Environment (FOEN)	Grant	645,000
Bilateral Aid Agency (ies)	Ministry of Foreign Affairs of Norway	Grant	800,000
Bilateral Aid Agency (ies)	U.S. Environmental Protection Agency	Grant	175,000
Intergovernmental Organization	United Nations Development Programme	Grant	30,000
Intergovernmental Organization	United Nations Development Programme	In-Kind	228,000
CSO	Kyrgyz Mining Association	In-Kind	50,000
CSO	Osh Aarhus Environmental Information Centre	In-Kind	30,000
CSO	Zoi Environment Network	In-Kind	120,000
Others	Almaty University of Power Engineering and Telecommunications	In-Kind	50,000
Others	University of Castilla La-Mancha (Spain)	In-Kind	100,000
GEF Agency	UNITAR	In-Kind	40,000
GEF Agency	UNEP	In-Kind	639,000
Total Co-financing			3,007,000

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY1

				(in \$)			
GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b	
UNEP	GEF TF	Persistent Organic Pollutants	Kyrgyz Republic	944,000	94,400	1,038,400	
Total Grant Resources				944,000	94,400	1,038,400	

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Estimated Person Weeks	Grant Amount (\$)	Co-financing (\$)	Project Total (\$)
Local consultants*	212	180,000	150,000	330,000
International consultants*	14	35,000	400,000	435,000
Total		215,000	550,000	765,000

^{*}Details to be provided in Annex C. Estimated weeks represent the grant amount and co-financing. UNDP co-finance will deliver its outputs through subcontracts.

F. PROJECT MANAGEMENT COST

Cost Items	Total Estimated Person Weeks/Months	Grant Amount (\$)	Co- financing (\$)	Project Total (\$)
Local consultants*	500	50,000	100,000	150,000
International consultants*				0
Office facilities, equipment, vehicles and communications*		20,000	54,000	74,000
Travel*		5,000	10,000	15,000
Others**	Translation	5,000	25,000	30,000
others	Specify "Others" (2)			0
Total		80,000	189,000	269,000

^{*}Details to be provided in Annex C.

^{**}For others, to be clearly specified by overwriting fields *(1) and *(2)

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? NO

(If non-grant instruments are used, provide in Annex E an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

H. DESCRIBE THE BUDGETED M & PLAN:

The project will follow UNEP standard monitoring, reporting and evaluation processes and procedures. Substantive and financial project reporting requirements are summarized in Appendix 7. Reporting requirements and templates are an integral part of the UNEP legal instrument to be signed by the executing agency and UNEP.

The project Monitoring and Evaluation (M&E) plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Appendix 4 includes indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Appendix 6 will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in Appendix 7.

Day-to-day management and monitoring of the project activities will be the responsibility of the executing agency, the State Agency of Environmental Protection (SAEP). SAEP will submit half-year reports to UNEP and a Project Implementation Report (PIR) in close collaboration with UNEP, once a year. SAEP will be responsible for the recruitment of local/international staff and/or consultants and the execution of the activities according to the work plan and expected outcomes.

The half-yearly reports will include progress in implementation of the project, financial report, a work plan and expected expenditures for the next reporting period. It will also include obstacles occurred during implementation period where necessary. The PIR will be prepared on an annual basis with the first report due one year after project implementation start according to GEF rules. It will be submitted by SAEP to the UNEP task manager.

Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global environmental benefits will be assessed with the Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

An independent, face-to-face mid-term evaluation will take place in month 18 as indicated in the project milestones. The evaluation will include all parameters recommended by the UNEP Evaluation Office for terminal evaluations and will verify information gathered through the GEF tracking tools, as relevant. The final evaluation, to be conducted by an independent consultant, will take place in month 36. The review will be carried out using a participatory approach whereby parties that may benefit or be affected by the project will be consulted. The Project Steering Committee will review the mid-term evaluation and provide elements for a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented

The National Steering Committee will be kept small but efficient and include the directly concerned stakeholders at the national level. It will meet regularly and will coordinate national activities.

The Project Steering Committee will comprise UNEP, SAEP and the involved bilateral donors. The Project Steering Committee will meet back-to-back with the technical meetings, *i.e.*, inception workshop and final workshop. The Project Steering Committee will meet physically twice during the project implementation and once through teleconference. The Project Steering Committee will monitor the progress of the project and give advice as to implementation issues.

Table: Monitoring and Evaluation Budget

M&E activity	Purpose	Responsible Party	Budget (US\$)	Time-frame
Inception workshop and gaps assessment*	Awareness raising, building stakeholder engagement, detailed work planning with key groups	SAEP	0	Within two months of project start
Inception report	Provides implementation plan for progress monitoring	Project coordinator	0	Immediately following Inception Workshop
Project Review by Project Steering Committee*	Assesses progress, effectiveness of operations and technical outputs; Recommends adaptation where necessary and confirms implementation plan.	SAEP	0	Month 1 and 18
Project Implementation Review – Mid term review	Progress and effectiveness review for the GEF, provision of lessons learned. This will be organized by SAEP in close consultation with UNEP.	SAEP	25,000	Month 18
Terminal report	Reviews effectiveness against implementation plan Highlights technical outputs Identifies lessons learned and likely design approaches for future projects, assesses likelihood of achieving design outcomes	SAEP	0	At the end of project implementation
Independent Terminal evaluation	Reviews effectiveness, efficiency and timeliness of project implementation, coordination mechanisms and outputs Identifies lessons learned and likely remedial actions for future projects Highlights technical achievements and assesses against prevailing benchmarks. Organized by UNEP	UNEP, Independent external consultant	35,000	At end of project implementation
Independent Financial Audit	Reviews use of project funds against budget and assesses probity of expenditure and transactions	SAEP	21,000	At the end of each year (3)
Total indicative M&l	E cost*1		81,000	

^{*}The inception workshop will be done back to back with the first Steering Committee Meeting, therefore costs reported will be "zero

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1. The <u>GEF focal area/LDCF/SCCF strategies/NPIF Initiative</u>:

This project is in line with GEF Focal Area Strategy CHEM-3: Pilot sound chemicals management and mercury reduction. After more than 70 years of mercury mining at Khaidarkan, a number of mercury-contaminated spots exist which are now sources of mercury emissions to the global and local environment. In addition to atmospheric emissions of mercury from the smelter and its waste products, the mine continues to supply primary mercury to the global market. The mine could produce and supply more than 1,500 tonnes of mercury in the coming decade that could eventually enter the global ecosystem. The project aims to:

- protect human health and the environment (stopping mercury releases);
- and cut the mercury supply.

Since the world's Governments agreed at the UNEP Governing Council in 2009 to prepare a global legally binding instrument on mercury to protect human health and the environment from mercury-related risks and with treaty negotiations underway, there is a timely high profile opportunity for the Kyrgyz Republic to act – as they are the last remaining major supplier of primary mined mercury to the international marketplace. The GEF and other international project partners are well positioned to fulfil the role of the innovative driver to this transformation process, which will ultimately support the national decisions for phasing out of primary mercury mining in Kyrgyzstan for the benefit of the global environment and to reduce local environmental and health risks. The progress as well as challenges towards the Khaidarkan mine transition could periodically be reported by the Kyrgyz delegation through the Intergovernmental Negotiating Committee (INC) process, Global Mercury Partnership meetings and other venues, as appropriate, to exchange experience, ensure transparency and keep the project on track.

A.1.2. For projects funded from LDCF/SCCF:the LDCF/SCCF eligibility criteria and priorities: N/A

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund: N/A

A.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

The project is consistent with several national priorities and actions plans:

- National Environmental Action Plan (NEAP): Kyrgyzstan's 1995 and 1998 NEAPs mention the Khaidarkan mine as a hotspot that needs to be addressed.
- **Kyrgyzstan Action Plan on Primary Mercury Mining** (2009): This plan has temporarily been suspended by the interim government decision in December 20106 and could be revised depending on how the political situation plays out. The State Agency on Environment and Forestry intends to revise and re-submit an Action Plan for approval in 2012.
- **National Environmental Health Action Plan** (NEHAP 1999): This plan mentions the fact that mercury contamination is an issue in Kyrgyzstan and it needs to be addressed urgently.
- Strategic Approach to International Chemicals Management (SAICM): currently works to update the national chemicals management profile of Kyrgyzstan and integrate sound management of chemicals considerations into national development plans and processes
- Country Development Strategy (2009-2011): This strategy favours development of infrastructure, hydropower and mining projects (the strategy is being revised by the government).

⁶ After a major political change in April 2010, many decisions of the President Bakiev's government cabinet, including an Action Plan on Primary Mercury Mining (endorsed in October 2009) were suspended or reversed.

B. Project Overview:

B.1. Describe the baseline project and the problem that it seeks to address:

The world's governments agreed at the twenty-fifth session of the United Nations Environment Programme (UNEP) Governing Council in 2009 to prepare a global legally binding instrument on mercury to protect human health and the environment from mercury-related risks. After the closure of major mercury mines in Almaden (Spain), Idrija (Slovenia) and Algeria, the Khaidarkan mine in southern Kyrgyzstan is the last remaining supplier of primary mined mercury to the international marketplace.

After more than 70 years of mercury mining and smelting at Khaidarkan, a number of mercury-contaminated hot-spots exist while atmospheric emissions of mercury from the smelter continue. These are sources of mercury release to the global and local environment. In addition to mercury releases from the mining and smelting operations, including its waste management, the mine continues to supply primary mercury to the global market. The mine could produce and supply more than 1,500 tonnes of mercury in the coming decade that could eventually enter the global ecosystem. The ultimate objectives of the actions of which this project forms part are to:

- protect human health and the environment by stopping mercury releases;
- cut the mercury supply.

The UNEP Global Mercury Partnership is one existing vehicle for the coordination of efforts between the Kyrgyz Government and the international community to move forward in phasing out primary mercury mining. An additional important linkage is UNDP's work to support the implementation of the Country Development Strategy, particularly because Khaidarkan as a community is economically dependent on the mercury mine and it is located in an impoverished region of the country. So far, the Governments of Switzerland, Norway and the United States have provided financial contributions to the project while UNEP, UNDP and UNITAR have played an active role in assisting Kyrgyzstan.

The Kyrgyz mercury mining phase out framework project partnership, led by UNEP, started in 2007 with initial discussions with the Government of Kyrgyzstan on mercury production at the Khaidarkan mine. At that time, a UNITAR-facilitated chemicals assessment in Kyrgyzstan, funded by the SAICM Quick Start programme, identified mercury as one of the priorities for action. The recognition of the dangerous nature of mercury and its negative impacts on the environment and health in Kyrgyzstan and in the world allowed UNEP to promote the initial dialogue through technical and social-economic assessments of primary mercury mining and initial screening of alternatives and remediation options. The assessments and dialogue process resulted in a formulation of the *Action Plan on Primary Mercury Mining and its Impact on the Environment in the Kyrgyz Republic.* The Action Plan was endorsed by the Government of Kyrgyzstan in October 2009 and presented by the Kyrgyz delegation consisting of the Ministry of Industry, Ministry of Natural Resources, State Agency on Environment and Forestry and NGOs at the Ad-Hoc Open-Ended Working Group meeting in Bangkok, Thailand, October 2009.

The Khaidarkan plant remains important to the local community, in particular as it is the primary income generator in the area. Up until now, there has been little presentation of economic alternatives to mercury mining to facilitate transition and gain a firm commitment from all key stakeholders. As long as the local economy and mining community remain threatened by mine closure, and the arrangements for alternative economic development are not well known and tested, neither the key government players nor the local community are likely to be confident and supportive of the phasing out of mercury production. Moreover, the lack of up-to-date and reliable local environmental and health data along with non-existing monitoring, reduces the weight of environmental arguments for cessation of mercury mining. In addition, exposure of local residents to environmental and health risks from mercury and releases into the environment continue as a result of the lack of preventive and remedial measures.

The proposed GEF project will (i) identify and promote economic alternatives to mercury mining (such as mining and processing of gold and non-metallic minerals as well as other non-mining small-scale business development) and (ii) Undertake remedial measures at contaminated areas identified as high-risk priority areas around the Khaidarkan mercury mine and smelter. In addition the project will enable a comprehensive assessment and monitoring of environmental and health risks and impacts of the mercury mining and improve knowledge and awareness of policy makers and local residents about environment and health risks. These project components will collectively contribute towards the effort of securing an agreement by the central authorities of Kyrgyzstan and the local community for primary mercury mining phase out in a socially and environmentally responsible manner.

The mercury mining in Kyrgyzstan has drawn the attention of the international community and donors. This has been demonstrated by the level of co-finance raised for this project. Between 2010 and now (GEF project proposal preparation time) international organizations (ZOI Environment and UNITAR) have been actively raising awareness of the mercury issue in Khaidarkan and seeking commitment from partners outside the government. More than 200,000 USD has been used for these purpose. This sum is not included as co-finance for this project as activities concluded prior to development of this proposal. However, that initial work has been instrumental in directing this proposal. During project execution it is expected that addition financial support will be leveraged, especially from private companies and donors willing to support the selected alternative(s) to mercury mining.

B. 2. <u>Incremental</u> /<u>Additional cost reasoning</u>: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated <u>global environmental benefits</u> (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The Khaidarkan mine is a major source of mercury releases and mercury supply. It presents both local and global hazards for public health and ecosystems. Under a business-as-usual scenario without the GEF project the Khaidarkan mine will continue production and supply of mercury to the global marketplace in line with the existing business plans and arrangements. Moreover, mercury emissions will continue unabated, and environment and health risks will persist or worsen.

This *intervention by the* GEF will enable conditions conducive to the promotion of non-mercury development alternatives facilitating the phase out of mercury production. It will improve capacities for diversified economic planning; the planning and execution of limited remediation and pollution monitoring; and raise awareness at local and central level regarding mercury mining.

The GEF project is an essential part of an international effort lead by UNEP to assist Kyrgyzstan in creating enabling conditions for the phase out of mercury production at Khaidarkan. Several governments, including Switzerland, Norway and the United States, have already provided funds to support the effort. The first phase (Phase I) of the effort in 2007-2009 lead to initial technical, socio-economic and environmental assessment of the current situation and the adoption of an Action Plan. The second phase (Phase II) focuses on three strategic areas for socially and economically responsible phase-out of mercury production. These strategies are:

- the assessment of the suitability of industrial investment based on known resources in the region of the mine,
- action at the local level to broaden the economic base and diversify the income opportunities for the community, and
- preparations towards the future remedial action at former mining and waste sites to reduce the environmental and health risks it poses in the area.

The proposed GEF project addresses the first and last of these bullets with the main focus on the promotion of alternative investments and priority environmental actions that have direct local and global environmental significance. Actions to broaden and diversify local income generation are covered by a UNDP-administrated programme on creating alternative job opportunities in Khaidarkhan, and is complimentary to the GEF intervention. UNDP has been involved in the identification of alternatives to mercury mining and the final report on the activities from 2007-2011 will be ready in the next weeks. However the work performed by UNDP has been mainly focused on the identification of local alternatives such as small business and small scale development opportunities in Khaidarkan. The level of investment required to implement the identified alternatives has not been assessed yet and it is expected that, among other things, the GEF funding will assist to further support the UNDP programme and to further assess the identified local alternatives and the level of investment required. Aside from the UNDP local alternatives and small scale development, the project will further assess and identify bigger alternative investment opportunities to mercury mining, which will have the potential to create a bigger number of employment opportunities (e.g. mining activities, tourism, etc).

Without the GEF support, the Kyrgyz government along with the international partners would not be able to make the necessary steps forward to phase out the supply of primary mercury from the Khaidarkan mine to the global market and to reduce mercury pollution. The environmental (local, national and global) and health impacts caused by mercury production and supply would continue unabated. Without the necessary GEF funding, it will difficult to promote alternative development, design the public-private partnership

framework and engage effectively with private partners for investment in alternatives. Moreover, without the GEF support, the work on preparation for remedial measures and risk reduction would not be possible and the scope of awareness raising on mercury issues would be very limited.

Economically speaking, if comprehensive actions are not taken to phase out primary mercury mining, the subsequent costs of the impacts of the continued mercury mining in Khaidarkan would be far greater. If the mine continues business as usual or decides to increase its production to levels seen some years ago, an estimated US\$ 6 million would need to be invested for maintenance and development. High costs would be incurred as a result of the unabated mercury pollution (growing health and remediation costs, losses in agriculture due to mercury contamination) as well as global costs (costs related to mercury pollution of sensitive ecosystems, downstream pollution). Whilst the investment that is needed to maintain or increase mercury production could be sourced either from the state or private channels, the costs associated with the mercury pollution would most likely have to be covered by the community and the Kyrgyz government (especially in the case of emergency). Furthermore, even though mercury prices have risen recently (linked to gold prices), in the longer term, mercury production and use is likely to decline with the onset of the global mercury instrument. A mercury phase out and a parallel launch of economic alternatives with help of GEF and other donors and investors, could not only increase economic performance of the region but also reduce environmental pressures from mercury mining activities.

Phase I of the Kyrgyz mercury project partnership led by UNEP and sponsored by Switzerland, Norway and the U.S. Governments included a range of activities that contributed to the establishment of a preliminary baseline (technical conditions, socio-economic and environmental situation) and prepared the ground for further actions (small grants programme, action plan, local partners) for a GEF intervention and other projects during the subsequent phase. Via its intervention, the GEF will contribute to the reinforcement of this baseline information and the improvement of the situation within the Khaidarkan area economically, environmentally and socially. The main improvements that the GEF grant would bring would be:

- 1. consolidation of the preliminary baseline by upgrading the analysis of the socio-economic and environmentally sound alternatives to mercury mining and the strengthening of the monitoring of health and environmental impacts of mercury mining and pollution
- 2. increased economic resiliency and diversity via a comprehensive assessment of mining alternatives to mercury mining with the *potential* of new investment into selected proposed options between US\$ 2-3 million (minimum) and US\$ 30-60 million (max) within 3-8 year timeframe, although this would depend on the economic and political climate in the country and the success of public-private partnership⁷
- 3. increased engagement of local community in alternative employment activities through a diversification of job opportunities and suitable alternatives
- 4. improved capacity for remedial measures, rapid response measures for environment and health risk reduction, and mercury monitoring programme. Moreover, a comprehensive study supported by the GEF would gather precise figures needed for targeted remediation and support decision making.

In relation to co-financing, several donors have expressed interest in providing support. Norway and other donors and project partners have confirmed co-financing for the GEF grant in excess of US\$1.5 million, while private investors / mining operators can potentially inject even more resources into the current project or follow-up activities. Indeed, the GEF through promoting investment into alternatives could create appropriate conditions for investors to participate in the endeavour. Also GEF involvement as a highly renowned institution would provide additional stimulus for investors to get in. It is important to highlight that the co-finance funds will be mostly used to provide international expertise and services to assist with the execution of project activities (e.g. hiring international consultants, conduct mercury analysis in expert laboratories, etc.) GEF funding will be mainly used to execute activities at the national level.

Global environmental benefit

With the global mercury treaty negotiations underway, much profile is being placed on primary mercury mining as the least preferred source of mercury in the international marketplace. The proposed GEF project intervention in Kyrgyzstan will enable conditions for gradual phasing out of its primary mercury mining and supply to the global marketplace. Kyrgyzstan's 10% share in the total global mercury supply is

⁷ Source:UNEP (2009): Kahidarkan Mercury : Addressing primary mercury mining in Kyrgyzstan. Refers to the estimated cost of further developing gold mining in the region

significant, and therefore the GEF project intervention will have high global effect in the long term. This project will also support the efforts made by the INC to develop a legally binding instrument on mercury, including limitations for primary mercury mining and supply and mercury management at the national and global level.

Moreover, curbing of Khaidarkan's atmospheric mercury emissions and reducing mobilization of locally deposited mercury into the local, regional and global environment clearly marks another global significance of the project. At the same time, passive prevention measures could limit public exposure to health risks. The targeted approach and efficiency of these measures could be further supported by the adequate monitoring, which will benefit the global knowledge of mercury hazard mitigation.

The upstream location of the Khaidarkan mine in the cross-border Sokh river basin shared between Kyrgyzstan and Uzbekistan that drains into the Ferghana Valley creates an opportunity to reduce the potential pollution risk for the international waters, which is another GEF priority focal area.

B.3. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read Mainstreaming Gender at the GEF.":

The community of Khaidarkan currently has 10,000 inhabitants. An estimated 800 of these, principally men, work in the mine although exact numbers are difficult to obtain and fluctuate with demand for the mines production. Other economic activities are also related to the mine or may depend on community income from the mine.

The overall objective of the project is thus to reduce community dependence on this single economic source by identifying alternative employment opportunities. The identification of 800 or more alternative jobs (to replace the current jobs supported by the mine) is thus a key target.

Economic diversification to boost sustainability is also important and will be supported by the work undertaken by UNDP.

Some families in Khaidarkan depend on agricultural activities and women are particularly involved in planting and harvesting. Due to the presence of mercury in the soil, women become particularly exposed to it. Biological factors – notably size, physiological, hormonal and enzyme difference between women and men - influence susceptibility to health damage from exposure to toxic chemicals⁸.

In Khaidarkan, many households are sustained by the income brought by men who, in some cases, go to work abroad; therefore women may be chronically exposed by remaining in the contaminated areas. The level of contamination in different media remains unknown but is believed to be high.

High poverty levels make it likely that children assist their mother's in agricultural chores and thus are also at high risk of exposure to mercury. Furthermore, mercury passes the placental barrier and may accumulate in the unborn foetus. A new study, conducted in part by the Harvard School of Public Health^{9,} suggests that in addition to the hazards facing a pregnant mother, mercury consumption more seriously affects her unborn baby, and can cause irreversible brain damage in children.

This project will reduce the negative impacts of hazardous chemicals to these vulnerable groups by seeking and promoting environmentally sound alternatives to mercury mining and by remediating some of the most contaminated areas that give rise to particular exposure risks to the community.

Another aspect to consider in the project is the development of an emergency response plan. Whatever decision is taken concerning the fate of the mine, it will show inherent risks that may potentially need an emergency response.

B.4 Indicate risks, including climate change risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the project design:

Disregard for the environmental and health impacts of the mercury mine: Since the Khaidarkan mine is closely related to local people's livelihood and infrastructure, the phasing out of mercury industry cannot be done easily. Local people regard the mercury mine positively, as a source of income for the community

⁸ UNDP, 2011, Gender Mainstreaming – Chemicals and gender

⁹ The Nutrition Source, Fish: friend or foe? Published by Harvard School of Public Health (2007)

and as a traditional activity, environmental and human health impacts from the mining of mercury are discounted. This project may be seen as a threat to the community and may be perceived as an attempt to stop their sustained source of income. The focus of the project is thus on alternative economic activity and with some environmental remediation. A measure to take may be to continue the inclusive transparent dialogue,. On top of all, difficult economic and social situation in the Kyrgyz Republic, especially in the Batken Province where the Khaidarkan plant is located, may delay some of the project activities (Medium Risk).

Political instability and shifting priorities: The uncertainties in Kyrgyzstan's political situation in 2010-2011 and continuous reforms in the Kyrgyz government have led to an uncertainty in the level of the commitment towards mercury mining phase out which may be perceived as a lack of political commitment. A possible risk management measure for this political instability and shifting of priorities will be to highlight the economic and social costs of mercury mining and the viability of suitable alternatives in order to secure widespread and long-term commitment of the Kyrgyz Government to the aims of the project **(Medium Risk).**

State investments or privatization of the mercury mine: If the state-owned Khaidarkan facilities become privatized during project execution (and if world mercury prices continue to grow), the activities carried out may need to be adapted and re-focused, with the uncertainty that the initial commitment of key stakeholders would not be secured and that the awareness raising campaign would need to be re-started to convince the new mine owners. A risk management measure in this case will be for the international community to convince the Kyrgyz government not to continue to pursue privatization and to dissuade potential investors in mercury production by highlighting the lack of a sustainable business model as a result of strict limitations on mercury use as a result of the international treaty **(Medium Risk)**.

Lack of local capacity: Local involvement is necessary for sustainability of the project. However, the low level of awareness and management abilities may hinder the project process. Capacity building activities will help the local residents and officials to understand the environmental and health risks of mercury. Proposed GEF intervention could align with as well as complement ongoing activities within UNDP identification for alternative employment opportunities programme, and enable the broader engagement of community members (Medium Risk).

Table 1: Summary of risk analysis and mitigation measures

Risk	Mitigation Measures
Disregard for the environmental and health impacts of the mercury mine Medium risk	A transparent dialogue will continue with local people and the government as well as key stakeholders. The development of local economic alternatives which will provide a reasonable income to the population and that is more environmentally friendly, to be identified through the project will provide good ground to understand the local situation and to compare which option (mercury vs nonmercury) is more sustainable.
	Another factor to consider is the fact that global efforts on mercury reduction are taking place and it is likely that demand for mercury will decrease over the years, therefore adopting a sustainable alternative to mercury mining seems a suitable option while the international community is attentive to the progress made in Khaidarkan and are ready to assist.
Political instability and shifting priorities Medium Risk	The project will encourage the institutionalization of the National Coordinating Committee, so the process to be initiated with key stakeholders would not be stopped even if there is a change of government.
State investments or privatization of the mercury mine	The Kyrgyz government would have to offset the benefits/drawbacks of privatisation and those of the economic alternatives presented in the project.
Medium Risk	Another factor to take into account is the pressure from the international community to stop mercury mining.
Lack of local capacity Medium risk	Proposed GEF intervention will complement national efforts with training and capacity built at the local level. The diversification of job opportunities presented during the project and the training and support to implement economically viable alternative jobs will reduce the risk of project failure.

B.5. Identify key stakeholders involved in the project including the private sector, civil society organizations, local and indigenous communities, and their respective roles, as applicable:

The current situation regarding the stakeholders involved directly or indirectly with the Khaidarkan mine is as follows:

State governance players - The State Agency on Environment and Forestry is a main counterpart for the international community and UNEP on the issues of primary mercury mining and therefore plays a key role in convening the global environmental demands and priorities and their reflection in the national policies. It will be responsible for environment-related GEF project components. The Khaidarkan mercury plant is formally owned by the State Property Management Fund (formerly Ministry for State Property) and its mining activities are controlled by and reported to the State Agency on Geology (formerly Ministry of Natural Resources). Therefore, the Agency will be a key player in transition-related component of the GEF project. The Ministry of Economy has an important decision-making role in the Kyrgyz Government regarding the mine's future (including decisions on state subsidies for geological survey and energy) and will be invited to participate in the project steering committee as well as in investment promotion. The National Statistics Committee of Kyrgyzstan keeps the records on pollution and chemicals use, exports and imports. It will be considered in the project.

a) Private and state mining sector- Whilst the Khaidarkan mercury mine is currently a state-owned industry, its privatisation cannot be excluded. From an environmental perspective, it could be an undesirable development if the government decides to continue or increase mercury mining under the new private or the current state ownership. The potential privatisation outlines the urgency to engage with the Kyrgyz Government to promote investment by the private sector or by the state (for example through Kyrgyz Altyn state-owned gold producing company) into non-mercury alternatives.

Several private mining companies operating around Khaidarkan are potentially interested in collaboration on non-mercury mining (gold and non-metal minerals). Further dialogue with private sector, presentation of pre-feasibility study results and elaboration of the institutional, legal frameworks and implementation mechanisms for public-private partnership may catalyze further interest and advance concrete steps towards alternative mining profile of Khaidarkan. The International Business Council (IBC) active in Kyrgyzstan could be used as one of the promotion channels.

b) *Civil society, including environmental NGOs and professional associations* - At the local level there are several different stakeholders related to mercury mining and environment:

Professional Mining Associations: Kyrgyz Mining Association promotes mining sector development and is aware of the detrimental environmental and health impacts of mercury production. The Kyrgyz Mining Association works with private mining business to encourage a shift away from the continuation of mercury mining and encourage the development of economic alternatives, such as gold. Kyrgyz Mining Association is well positioned to support the GEF project in promotion of industrial transition linking state (Ministries, Government) and private (companies, investors) players.

Science: AUPET located in Kazakhstan, the closest neighbour of Kyrgyzstan, has extensive experience in planning and implementation of demercurization programmes for chlor-alkali production sites. The university staff is willing to share its expertise and experience with Kyrgyz counterparts. In addition, scientists from Spain, Russia and Slovenia, who have practical experience in environment and health monitoring are available to support Kyrgyz colleagues in specific project activities. The Institute of Chemistry, the Institute of Geology and Osh Technical University in Kyrgyzstan could be involved as local scientific project counterparts.

Further scientific cooperation opportunities could be explored with NATO's Science for Peace project on monitoring of transboundary water pollution in Central Asia.

Environmental NGOs are working on local public awareness, advocacy, independent studies of technical and economic aspects of mercury mining and transition to alternatives. The Osh Aarhus Environmental Information Centre has been active in raising awareness and conducting public hearings on mercury pollution and passive measures for health and environment risk reduction. NGO "Public Ecological Expertise" works on the issues linked to sound chemical management

which also includes mercury. Zoi Environment Network will provide and coordinate international expertise for the project.

Local Community: mixed feelings still persist in the local community about mercury mining and the possible switch to economic alternatives (see section 2.1). The major concern is more the security of the local economic situation and jobs whilst less concern is about the environment and health issues that mercury production presents. However local farmers for example, are against polluting industry as their crops and water supplies are affected by contaminants which are a result of mercury mining and dust formation from tailings.

B.6. Explain how cost-effectiveness is reflected in the project design:

The guidelines for mercury remediation and air mercury concentration monitoring developed by the project, experience from demonstration of risk reduction measures, and other tangible results will be shared with interested national stakeholders and countries to the extent possible. Moreover, future investments into alternative development of Khaidarkan will multiply GEF funding and co-financing.

This project will be cost effective by:

- Enhancing an effective communication through the establishment of the steering committee, professional project team and using the existing capacities (including labs, local experts, etc);
- Encouraging innovation in public-private partnership (e.g. Gold and other minerals mining) and investment promotion;
- Considering experience and lessons learnt from similar projects in Spain and Kazakhstan;
- Demonstration of low-cost and locally specific mercury risk reduction and remedial measures;
- Developing strategies/approaches for remediation of mercury-contaminated areas that can be used in abandoned mercury mines of Kyrgyzstan or other countries.

This project will coordinate closely with other project interventions on mercury coordinated by UNEP and make the appropriate linkages with SAICM activities on sound chemicals management.

B.7. Outline the coordination with other related initiatives:

The focus on the promotion of economic alternatives to encourage a shift away from a mercury industry which is impacting upon the local and global environment is relatively new area for the GEF and so there are no immediate direct links with other GEF and non-GEF interventions. Perhaps, substitution of ozone depleting substances is the closest proxy. However, strong synergies with other projects within Kyrgyzstan can be made, such as with an ongoing Kyrgyz hazard mitigation project with a component on remediation and risk reduction at the Maili-Suu former uranium mines, which is partly GEF-funded and being implemented by the World Bank. Whilst uranium mine legacies present different challenges to mercury pollution, the lessons learnt from experience of Maili-Suu can be obtained and applied to the proposed project at Khaidarkan. Furthermore, in neighbouring Kazakhstan, recent experience and knowledge from mercury remediation/cleanup efforts in the Nura river basin could be relevant for Khaidarkan.

This project will also make strong linkages with the UNEP/GEF Pamir Alai Sustainable Land Management project in Kyrgyzstan and Tajikistan. This project seeks to mitigate the causes and negative impacts of land degradation on the structure and functional integrity of the ecosystems of the High Pamir and Pamir-Alai Mountains by mainstreaming sustainable land management tools and practices from household, community, local government, national and regional levels¹⁰. The project aims to improve the social and economic well-being of the rural communities and households utilizing the region's resources to meet their livelihood needs, while preserving its unique landscape and globally important biodiversity. One of the main outcomes is the reduction of rural poverty and economic vulnerability through restoration and enhancement of the productive and protective functions (ecological goods and services) of the High Pamir and Pamir-Alai mountain ecosystems Both projects will address the effects of land degradation (in the case of the Khaidarkan mine project mercury contaminate sites) and will share lessons learned and guidance on management of contaminated sites. The ways of participation of different stakeholders and the restoration of ecosystems that will allow initiating or re-starting the economic activities in former contaminated areas will also be an important topic and a considered and shared among the two projects.

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 $^{^{\}rm 10}$ Source: UNEP PALM project, available through internet: http://www.ehs.unu.edu/palm/

With regard to linkages with non-GEF interventions, there are projects which are ongoing in southern Kyrgyzstan linked to Khaidarkan. First and foremost, the UNDP-administrated programme creating alternative jobs for the Khaidarkan community. This programme is assisting in setting up small businesses, and is encouraging economic diversification with the goal of poverty reduction. The project seeks to promote alternative employment in the area and decrease economic dependence on the mercury mine. The World Bank has also facilitated a number of projects in the area including building capacity in governance and revenues management for mining sector (EITI) and improving agricultural services and irrigation network. Other donors such as the Asian Development Bank, the Japanese Agency for International Cooperation, and the Swiss Development Cooperation and others have been financing an array of projects in southern Kyrgyzstan, predominately with an economic focus. Some of these projects are linked to agriculture and water and so can be potentially affected by the pollution which comes from the mercury mine. The future remedial efforts and phasing out of mercury mining would therefore have a positive impact on the success of these projects downstream.

UNEP is currently implementing two Ozone related projects in Kyrgyzstan: Institutional Strengthening and Hydrochlorofluorocarbons (HCFCs) Phase-out Management Plan (HPMP). Both projects have a strong capacity building component and upgrading of legislation that will greatly assist this project. This project will make the necessary linkages and arrangements to participate in the upgrading of legislation and will look for synergies in the different capacity building activities to be performed. Coordination between UNEP DTIE Chemicals and UNEP DTIE Ozone will take place after project approval.

UNITAR will engage in 2012-2013 with two non-GEF interventions in Kyrgyzstan on the GHS (funded by the SAICM QSPTF) and on integrated chemicals management in support of SAICM implementation (funded by Switzerland). UNITAR will seek maximum synergies between these two projects and the current proposed project on mercury mining.

C. GEF AGENCY INFORMATION:

C.1. Confirm the co-financing amount the GEF agency brings to the project:

UNEP will provide a contribution of USD 344,000, of which USD 200,000 are provided in cash and USD 144,000 in-kind. UNEP has also leveraged cash co-finance from Norway for a total of USD 800,000. The Norwegian co-finance will complement the GEF project with international activities and experts to the project.

C.2. How does the project fit into the GEF agency's program (reflected in documents such as UNDAF, CAS, etc.) and staff capacity in the country to follow up project implementation:

The United Nations Development Assistance Framework (UNDAF) report for Kyrgyzstan (2012-2016) focuses on three main pillars: 1) Peace and Cohesion, Effective Democratic Governance and Human Rights, including justice for all; 2) Social Inclusion and Equity, encompassing social protection, food security, education and health; and 3) Inclusive and Sustainable Job-Rich Growth for Poverty Reduction, with particular attention to women and youth as well as vulnerable groups11. This project is directly linked to pillar 2 and 3 and indirectly to pillar 1. This project is particularly relevant to Millennium Development Goal (MDG) 1: Eradicate extreme poverty and hunger; MDG 5: Improve maternal health; MDG 7: Ensure environmental sustainability; and MDG 8: Develop a global partnership for development.

Under UNDAF's pillar 1 (Peace and Cohesion, Effective Democratic Governance and Human Rights) it will be imperative to ensure that real and sustainable capacity development of people in the Kyrgyz Republic takes place. This project will ensure that a transparent decision making process is in place and that key stakeholders are properly represented. Minority and vulnerable groups will be empowered to participate in the project's decisions and will obtain sound information on the current situation and future plans. One of the national priorities under pillar 2 (social inclusion and equity) is to ensure social obligations and to develop the social sector. This project will work with vulnerable groups and will promote equal participation in decision making processes and activities. Under pillar 3 (inclusive and sustainable growth for poverty reduction) the project will contribute to outcome 1, which is inclusive growth leading to decent and productive employment and improved access to productive natural resources, markets, services and food security. By diversifying the availability of jobs and by promoting the creation of new employment opportunities, the project will contribute to the inclusion of the poor and the youth. Achieving this will be possible through partnerships with key players. Under the same pillar 3, this project will also make a useful contribution towards the achievement of outcome 2: sustainable management of energy, environment and natural resources practices is operationalised. This project will ensure that alternatives proposed to mercury mining activities will be sustainable and will respect the natural environment and promote sound environmental management.

All GEF proposed interventions in GEF V, whether POPs, mercury, sound chemicals management or Ozone, are complementary to UNEP's Subprogramme 5 (Harmful Substances and Hazardous Waste). Expected Accomplishment 3 of the sub-programme seeks to put in place appropriate policy and control systems for harmful substances of global concern; mercury is a target substance in this regard. Programme of Work Output 531 is to develop an international framework for action to minimize the availability, accessibility and use of mercury. UNEP delivers this output through its Global Mercury Programme (Project 53-P1) that (i) supports the international negotiations on a global, legally-binding instrument on mercury; and (ii) promotes the take up of immediate actions through the Global Mercury Partnership. These activities have been specifically mandated by Governing Council decision. The project proposed here is complementary to and extends work under the Supply and Storage partnership area of the Global Mercury Partnership that, as a result, represents important co-financing to this initiative. The Khaidarkan mercury mine is the last commercial mine producing primary mercury for export to world markets; therefore addressing mercury supply from this source is considered as having the potential to deliver significant global impact.

UNEP has Chemicals and POPs related staff capacity in the Regional Office for Asia Pacific (ROAP), based in Bangkok, Thailand. ROAP will assist UNEP DTIE to identify further opportunities for cooperation with ongoing and planned activities in the region. Experts from the UNEP DTIE and ROAP offices will provide substantial input throughout the duration of this project.

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¹¹ Source: United Nations Development Assistance Framework (UNDAF) for the Kyrgyz Republic 2012-2016 (March 2011)

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. INSTITUTIONAL ARRANGEMENT:

The management and regulation of the state-owned Khaidarkan mercury plant and decision making responsibilities are complex. Ministries' and agencies' views on the issue of mercury production vary depending on their role and awareness of mercury issue and this lead to difficulties in having a consolidated position. The following national players are relevant to the project context:

Khaidarkan Mercury Plant is a state-owned enterprise (99.9%) but it has a significant degree of autonomy in management, contracting, and production planning. Two ministries supervise the Khaidarkan mercury plant: the State Agency on Geology and Mineral Resources (operational manager) and the Ministry of State Property (assets manager). The Ministry of Economic Regulation and Antimonopoly and the Ministry of Finance decide and provide state subsidies and loans to the plant.

The State Agency on Environment and Forestry is a specially designated governmental institution dealing with inspections, issue of permits and limits for emission release, review of environmental plans, and various environmental monitoring activities. The Agency was the lead actor in coordinating preparation of an Action Plan on Primary Mercury Mining. The Agency's Director is the operational GEF focal point. Agency's representative is a SAICM focal point. The Agency's Centre on ecological safety is supervising international environmental projects implementation. The Agency's departments and a laboratory in southern Kyrgyzstan are responsible for inspections and enforcement of environmental performance and investigating local residents' complaints. It should be noted that State Agencies in Kyrgyzstan are not a part of the Cabinet of Ministers, therefore their status in the Kyrgyz governmental structure is somehow below the one of ministries'. The ongoing reforms in Kyrgyzstan governing structures may eventually transform certain functions of the State Agency on Environment and increase the importance of the State Inspection on Environmental and Industrial Safety under the Government of Kyrgyzstan in the context of the GEF project.

The State Agency on Geology and Mineral Resources (formerly Ministry of Natural Resources) fulfils technical coordination and information gathering functions related to Khaidarkan. In view of ongoing restructuring of the Kyrgyz Government, the functions of this agency and its role in the GEF project will need to be better identified.

The State Property Management Fund (formerly Ministry of State Property) has 99.9 percent of governmental share holdings of Khaidarkan and is responsible for the privatisation process.

The Ministry of Emergencies is dealing with the safety of the abandoned and active tailings ponds (though abandoned and active mercury mining sites are not part of the current responsibility). The Hydrometeorological service under the Ministry of Emergencies carries out a nationwide environmental monitoring programme, focusing on urban air quality as well as water quality in the main rivers, but it does not conduct any environmental monitoring in or around Khaidarkan.

The Central Statistical Office of the Kyrgyz Republic collects information about pollution levels (air emissions, wastewater discharge, water use, waste accumulation) directly from the relevant industrial activities, including Khaidarkan, and publishes summarized information in its state of the environment reports (statistical format) every three to four years. Data on imports and exports of industrial products is also available from the statistical office. They are responsible to make publically available industrial production data.

Other actors include: the Kyrgyz Mining Association, the Osh Aarhus Environmental Information Centre, the NGO "Public Ecological Expertise", the Ken-Too Mining Project Design Centre, and the Kadamjai Sanitary Station and laboratories. These are all relevant to the GEF project context. The Aarhus Centre's and Kyrgyz Mining Association's roles as interfaces between mining sector and other sector interests, especially the environment, is essential for political dialogue, investment promotion, pre-feasibility and socioenvironmental studies. Lobbying on chemical safety and mercury risk reduction is undertaken by the NGO "Public Ecological Expertise".

The laboratories specializing in environmental analysis are the Alex Stuart Environmental Laboratory (independent private laboratory) and the Chui Ecological Laboratory in Kara-Balta (70 km from Bishkek). The Institute of Chemistry of the Kyrgyz Academy of Sciences also has laboratory capacities but they are mainly used for scientific projects. The Khaidarkan mercury plant has laboratory dealing with pollutants,

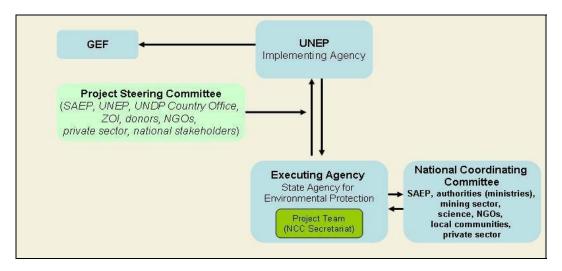
although its equipment and methodology is considered out-of-date and mainly serve industrial production needs rather than environmental monitoring.

Sanitary-Epidemiological Station (SES) in Kadamjai (50 km away from Khaidarkan) is tasked with monitoring of environmental health conditions at Khaidarkan and has experience in mercury monitoring, but it lacks reliable and modern equipment.

The Osh-Batken territorial department for environmental protection reports to the State Agency on Environment and Forestry and is involved in supervising local environmental issues. The territorial department carries out inspections and surveys of the Khaidarkan mining plant once a year (or more often in case of local residents complaints) in cooperation with Kadamjai Sanitary Station. Although the department has a laboratory, its old equipment, lack of certification, challenges of regular supply of lab consumables, and limited staff prevent continuous and reliable environmental measurements.

B. PROJECT IMPLEMENTATION ARRANGEMENT:

The figure below shows the institutional framework and project implementation arrangements:



UNEP will be the GEF implementing agency in this project. It is mandated by its Governing Council to work to protect human health and the environment from exposure to mercury by:

- convening an intergovernmental negotiating committee to prepare a global legally binding instrument on mercury; and
- continuing and enhancing international action, including through the Global Mercury Partnership.

Since 2007, UNEP has convened an advisory group comprising of the Kyrgyz Republic, donor governments, international partners (UNITAR, UNDP, Zoi Environment Network), and experts to work towards the phasing out of primary mercury mining. As the implementing agency, UNEP will manage the project by providing substantive input and financial coordination within the larger Kyrgyz mercury project partnership. UNEP will collaborate closely with its partners (see below) to convene stakeholders, coordinate with international players and supervise the project activities.

UNEP has led the Kyrgyz mercury mining phase out framework project partnership, started in 2007 when UNEP initiated discussions with the Government of Kyrgyzstan on mercury production at the Khaidarkan mine. At that time, UNITAR-facilitated chemicals assessment in Kyrgyzstan identified mercury as one of the priorities. The recognition of the dangerous nature of mercury and its negative impacts on the environment and health in Kyrgyzstan and in the world allowed UNEP to promote the initial dialogue through technical and social-economic assessments of primary mercury mining and initial screening of alternatives and remediation options. The assessments and dialogue process resulted in a formulation of the *Action Plan on Primary Mercury Mining and its Impact on the Environment in the Kyrgyz Republic.* The Action Plan was endorsed by the Government of Kyrgyzstan in October 2009 and presented by the Kyrgyz delegation consisting of the Ministry of Industry, Ministry of Natural Resources, State Agency on Environment and Forestry and NGOs at the Ad-Hoc Open-Ended Working Group meeting in Bangkok, Thailand, October 2009.

The State Agency for Environmental Protection and Forestry will be the GEF *executing agency* in this project and will facilitate national coordination and project implementation. It will organize independent audits in order to guarantee the proper use of GEF funds allocated at the national level. Financial transactions, audits and reports will be carried out in accordance with national regulations and UNEP procedures. It will also provide regular progress and financial reports to UNEP. According to its core competence, the State Agency for Environmental Protection (in cooperation with other competent institutions, such as the State Inspection on environmental and technical safety) will supervise remedial measures planning and environment and health risk reduction measures and information dissemination to ensure that national requirements are met.

The Centre on Ecological Safety within the Agency will be a *supporting executing partner* for remedial planning and risk reduction measures.

The Osh Aarhus Environmental Centre located close to Khaidarkan will be a *supporting executing partner* for environmental and health studies and awareness raising.

Considering the complex nature of the GEF project components and the mandates/competencies of relevant national ministries and agencies in the Kyrgyz Republic, the Ministry of Natural Resources and the Ministry of State Property (or their successors in the case of future governmental changes) will supervise activities related to the economic transition of Khaidarkan. For enabling direct links to the private sector, the Kyrgyz Mining Association will be a *supporting executing partner* for this task.

Zoi Environment Network and UNITAR, organizations which have experience in Kyrgyzstan and strong backgrounds in carrying out technical assessments, trainings and capacity building, have been identified as key organizations that will support the GEF Kyrgyz mercury project. In this way, the State Agency for Environmental Protection and Forestry of the Kyrgyz Republic will be the key *national* GEF project partner *internally* executing the project, UNEP implementing the project and Zoi Environment Network will be *international* project partner *externally* facilitating the project.

At the international level, A Project Steering Committee (PSC) will be created and it will meet at the beginning, mid-term and at the end of the project. This committee will be formed by donors, executing and implementation organisms (UNEP, State Agency of Environmental Protection, State Agency of Geology, Ministry of Economy, donors, Zoï Environment Network) and other GEF implementation organisms. This committee will evaluate the progress of the project and will take the necessary measures to guarantee the fulfilment of the goals and objectives. It will meet twice during the project execution, at the beginning and at the end of the project.

At the National level, a **Project Team (PT)** will be established within the *executing agency*; this team will be in charge of the execution and management of the project and it will report to UNEP and to the Project Steering Committee; also, it will be composed by the Project Coordinator, Technical Assistant and Management Assistant. The State Agency of Environmental Protection, the *executing agency*, will be supported by the Osh Aarhus Environmental Information Centre. The Management Assistant will be located in Osh, a second largest city of Kyrgyzstan, in proximity to Khaidarkan. The Osh Aarhus Environmental Information Centre agrees to host the position. The location of the Management Assistant will allow discussing any pressing issues that may arise during project execution.

The activities under the project will be facilitated by internal project communication with national and local counterparts regarding the implementation of activities both at the national and local levels. The Ministry of Natural Resources will cooperate closely with the State Agency of Environmental Protection ensuring coordination at the national level. UNEP will actively communicate with project partners on the progress of the project.

The **National Coordinating Committee** (NCC) will be in charge of decision making throughout the project. The ministries, the representatives of mining industries and professional associations, science and the corresponding NGOs will be part of this committee. NCC will decide on the frequency of the meetings and their operating procedures. Regular meetings will be carried out throughout the implementation, and additional meetings may be set if necessary. NSC will supervise the tasks of the Coordinator of the Project and of the implementation team. Likewise, this committee will review, comment on and approve the work plan. Every decision made by the Committee, such as the corresponding liabilities, schedules and budget, will be duly reported to whom it may concern. Members of the NCC will facilitate the implementation of

project activities within their corresponding organizations, they will guarantee that cooperation activities are timely executed and they will promote integration

Also, throughout the project, Zoi Environment Network will be engaging with the Kyrgyz Mining Association, a professional organization that represents the mining sector of Kyrgyzstan. This association is self-governing, independent and is not linked to any political party. Their mission is to provide broad technical and legal expertise to develop and promote the mining sector in the Kyrgyz Republic. The Kyrgyz Mining Association was actively engaged in *Phase I* and it has also since officially joined UNEP's Mercury Partnership. Together with the other project partners, the Kyrgyz Mining Association, during *Phase II*, will participate in the project ensuring direct links with the private mining sector and maximize conditions for investment into alternative economic development of Khaidarkan.

UNITAR in the previous *Phase I* has facilitated socio-economic assessment, an action plan to address primary mercury mining in the Kyrgyz Republic and trainings. Currently UNITAR implements SAICM project in Kyrgyzstan and will establish necessary synergies.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF

NA

PART V: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(s) ON BEHALF OF THE GOVERNMENT(s): (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

Name	Position	Ministry	DATE (MM/dd/yyyy)
Baianbek KADYROV Director of State Agency on Environment Protection and Forestry of the Kyrgyz Republic	GEF Operational Focal Point	State Agency on Environment Protection and Forestry	11.25.2011

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Maryam NIAMIR- FULLER	7471. 8M	5700 07/10/2012	Jorge OCAÑA CORREA	+41 22 917 81 95	jorge.ocana@unep.org
Director, UNEP GEF Coordination Office			Task Manager		

ANNEX A: PROJECT RESULTS FRAMEWORK

Strategy Narrative	Indicator	Units	Baseline	Mid-Term Target	End of Project Target	Sources of verification	Risks and Assumptions
Project Goal: To protect human health an	nd the environme	ent from the	toxic exposure of mercury	by phasing out mercury	production and suppl	y in Kyrgyz Republi	С
Project Objective: to enable socially comeconomic activities	patible economi	c transition	of the Khaidarkan commu	nity from primary mercur	ry mining to more envi	ronmentally and so	cially sound
The expansion of economic opportunities will be built on the results of prefeasibility calculations for non-mercury mining options in the region (led by national government) and the local alternative development options (coordinated by UNDP). At the same time, institutional and regulatory adjustments need to be introduced to create a balanced and attractive mechanism for public-private partnership and investment. As preliminary studies indicate, alternative mining options are considering mining activities (e.g. gold production and non-metallic minerals production such as serpentinite, bentonite, gypsum, facing stones). In parallel, non-mining investment opportunities will be identified as well as the the ongoing alternative employment opportunities programme administrated by UNDP will complement local alternative development efforts by supporting small-scale in-come generating activities, creating new jobs and reducing dependency on the state-owned mercury plant and providing a range of non-mining alternatives to the local population. It is expected that all of these studies and assessments will be an integral part of the national plans and strategies for development.	Analysis of non mercury mining alternatives and employment opportunities.	NA	Preliminary socio- economic analysis of primary mercury production at Khaidarkan. Report of the phase II of UNDP project "creating job opportunities in Khairda- kan", including the independent evaluation. Action plan for mercury management developed but needs update. Country Development Plan for 2009-2011	Alternatives to mercury mining identified (mining and non-mining alternatives). Socio-economic aspects of alternatives to mercury mining assessed. Job opportunities study developed. Baseline information to national plans and strategies for alternative employment opportunities gathered	Key National stake-holders to support alternatives to mercury mining and developed a roadmap for their implementation National plans and strategies updated and including mercury decrease considered for adoption	Socio-economic analysis available Report on suitable alternatives to mercury mining and job opportunities in Khaidarkan available National plans and strategies on mercury management through the SAEP website	Kyrgyz government and private investors interested to participate. Alternatives to mercury mining supported by key stakeholders. Adoption of action plan and other strategic national plans out of this project's control Partners participa-tion from the inception workshop essential

Strategy Narrative	Indicator	Units	Baseline	Mid-Term Target	End of Project Target	Sources of verification	Risks and Assumptions
Without detailed environmental and health assessment, it is impossible to effectively target the future environmental remediation and risk reduction measures and check the progress against the baseline situation. The monitoring programme (especially for atmospheric air, drinking water, local crops and food supply and local population's health) is crucial for understanding of the true scales, key sources, trends over time and pathways of mercury pollution, including impacts on the global environment and health of local residents. Finally, the non-stationary system for air monitoring and emergency response will greatly reduce the risk to take samples from the mine to the laboratories and will allow authorities to have reliable information on site within a reasonable time.	Status of the development of a monitoring and health impact system.	NA	Analytical capacity for mercury monitoring in humans and environment not known in Kyrgyzstan. Preliminary report on environmental issues related to primary mining in Khaidarkan available Mercury monitoring system for rapid response not available	Analytical capacity built (laboratories inter-calibration studies, laboratories database) for mercury monitoring. Detailed Environmental and health analysis of mercury mining concluded. Mercury monitoring system and emergency response sys-tem developed and implemented	Capacity built in mercury monitoring generates reliable information to support a sound decision on the fate of the mine. Environmental and health impact analysis support government decision	Mercury monitoring data generated within the project. Environmental and health impact analysis report available	Laboratories willing to participate. Government to support mercury monitoring efforts.
High-risk areas identified in a comprehensive assessment will be reviewed and potential remediation technologies for them proposed and tested. Rapid response and risk prevention measures will be designed and implement-ted to possible extent for immediate positive effects on the local and global environment and health safety. These include fencing and/or sealing of the selected contaminated areas, changes in land use, crops and other cost-efficient measures which reduce exposure to risks. Strategy and guidelines for the development and implementation of remediation measures will be developed and best practices from Central Asia (Kazakhstan) and Western Europe (Spain, Slovenia) deployed.	Total area fenced off, structures reinforced and sludge treated	# hectares, number of stru- cture and cubic meters	Oha / Ostructures / O m3	4ha / 2 structures / 100m3	47ha / 5 structures / 200m3	Remediation report and certificates.	Selection of sites may generate conflict. All stakeholders will participate, thus minimizing the risk of conflict.

Strategy Narrative	Indicator	Units	Baseline	Mid-Term Target	End of Project Target	Sources of verification	Risks and Assumptions
Awareness raising is essential in the present situation when the ministries have different priorities (continuation of mercury mining vs. environmental concerns and phasing out of mercury mining) and when at the national level links between the Khaidarkan mercury and the global environmental concerns and negotiations are not well known or understood. In addition, there is little awareness and inadequate evidence of mercury impacts and pollution in Khaidarkan. When the comprehensive study and monitoring programme would be completed and launched, the awareness raising would be used to help guide decision making with the intention of reducing the exposure to pollution in Khaidarkan and across Kyrgyzstan, including the use of mercury in artisanal gold mining. Whilst this may be a social method, its final outcome is to help to achieve the overall project goal. Raising awareness on the international mercury instrument and its inevitable impact on the mine's future is required to reduce the policy-makers and local people's indifference on this issue. Previous project activities show that transparency, inclusiveness and sharing of information are the key for cooperation between all stake-holders. Therefore this project component would ensure these important conditions are met. In this context, the project will cooperate closely with the Extractive Industry Transparency Initiative (EITI) in Kyrgyzstan, not least for improved public transparency of Khaidarkan's activities. The awareness raising and campaign to promote alternatives to mercury mining will also target the high political class. This will allow them to take an informed decision on the fate of the mercury mine.	Number of targeted events /activities organized by the project coordination to reach target audiences (government, industry, research institutes, local residents, and journalists).	# of events	Awareness of alternatives to mercury mining through UNDP project phase II Awareness raising materials developed by UNITAR /UNEP/ZOI	10 (2 for each target audience)	At least 15 (3 for each target audience)	Events' reports	Participation of interested partners

Strategy Narrative	Indicator	Units	Baseline	Mid-Term Target	End of Project Target	Sources of verification	Risks and Assumptions
Outcome 1	: Community reliance on	mercury mining redu	ced through identification	n of alternative diversifi	ed employment opportunit	ies	
	1.1 Number of alternatives undergoing requiring socio economic analysis, environ-mental impact assessment and roadmap developed for the implementation of identified mining alternatives.	# of mining alternatives	Preliminary socio- economic analysis of primary mercury production at Khaidarkan Preliminary report on Environmental issues related to primary mining in Khaidarkan	3 mining alternatives analysed Socio economic analysis of mercury mining	10 mining alternatives analysed	Socio economic analysis and environ-mental impact report of mining alternatives available in UNEP's website	Key stakeholder institutions able to cooperate
	1.2 Number of priority alter-native non-mining economic activities identified; socio-eco- nomic analysis, environ-mental impact assessment undertaken	# of non-mining alternatives identified	Preliminary socio- economic analysis of primary mercury production at Khaidarkan.	5 non-mining alternatives identified and analysed	10 non-mining alternatives identified and analysed	Socio economic analysis and environ- mental impact report of non-mining alternatives available on UNEP's website	Key stakeholder institutions able to cooperate
	1.3 Number of alternative job opportunities (small business projects) created in Khaidarkan under the UNDP programme	# of trainings; # of small business projects # of employment opportunities	0 trainings 0 small business projects 0 employment opportunities identified in the project	4 trainings; 4 small business development projects 200 employment opportunities identified in the project	At least 6 trainings and roundtables, At least 10 small business development projects At least 800 employment opportunities for miners, poor farmers and unemployed (women not less than 30%) identified in the project	UNDP report on Job opportunity programme available on UNEP's website Project's identification of employment oppor- tunities report available	Khaidarkan community willing to explore alternative job opportunities
	1.4 Number of national plans and strategies	# of national plans and strategies for development and chemicals management	Action plan for mercury management developed but needs update. Country Development Plan for 2009-2011	2 national development plans include mercury reduction	4 national development plans and strategies include mercury reduction	National development plans and national strategies for development and/or chemicals management	Adoption of action plan and other strategic national plans out of this project's control Partners participation from the inception workshop essential

Strategy Narrative	Indicator	Units	Baseline	Mid-Term Target	End of Project Target	Sources of verification	Risks and Assumptions
Outcome 2	: Impacts of mercury mini	ing evaluated througl	n enhanced human health	and environment moni	toring		
	2.1 Number of laboratories able to perform mercury analysis in humans and environment in Kyrgyzstan	# of national laboratories # of local specialists trained # of laboratories participating in an inter-calibration study	Limited national capacities capable of performing mercury monitoring in humans and/or the environment 0 local specialist trained 0 intercalibration studies	2 national laboratories 4 local specialists trained in field sampling, 2 laboratories participating in an intercalibration studies	4 national laboratories 10 local specialists trained to field sampling 4 laboratories participating in an intercalibration studies	Data reports from laboratories Reports from specialists' training sessions Results from inter- calibration study	National laboratories and experts willing to participate in the training and inter- calibration studies
	2.2 Number of people and villages monitored on health and environmental impacts of mercury mining in Khaidarkan area	# of people monitored # of villages monitored	Preliminary report on environmental issues related to primary mining in Khaidarkan available	2,000 people monitored 1 community villages	At least 5,000 people monitored At least 3 villages monitored	Report on environmental and health impacts of mercury mining available	Health practitioners and environmental experts willing to undertake this study
	2.3 Status of development of guidelines and establishment of a monitoring system for air emissions and emergency response	NA	No mercury monitoring in air and emergency response systems in place in Kyrgyzstan	Equipment for emergency response and air monitor-ring of mercury (e.g. mobile unit for mercury testing and consumables) purchased.	Data on air monitoring and accident response made available through the use of the equipment purchased	Data report on air monitoring	Government to ensure sustainability and continuous use of the equipment purchased.
Outcome 3	: Reduced risk exposure f	rom mercury contam	inated sites through remo	edial and risk prevention	n measures		
	3.1 Number of sites identified for remediation targets and to establish priorities	# number of remediation sites identified	No prioritization of remediation is available	2	At least 3 sites identified for remediation	Report including remediation targets and priorities	Stakeholders' agreement on list of priority sites and criteria used
	3.2 Number of technicians and experts trained on mercury remediation	#of trainees	No previous training on remediation	10	20	Training records	Availability of national technicians and experts on soil remediation

Strategy Narrative	Indicator	Units	Baseline	Mid-Term Target	End of Project Target	Sources of verification	Risks and Assumptions
	3.3 Number and spatial extent of facilities fenced and subject to remediation measures., number of structures reinforced	# of hectares and structures	0ha / 0 structures / 0 m3	4ha / 2 structures / 100m3	47ha / 5 structures / 200m3	Remediation report	Sites selection done in a transparent manner Cooperation of local people
Outcome 4	: Enhanced governance th	nrough awareness rai	sing and stakeholders' pa	rticipation on the trans	ition to mercury mine alter	natives	
	4.1 Number of media articles/ reports/videos/radio emissions produced	# media materials	No media coverage known to date	10 media materials produced and disseminated	25 media material produced and disseminated	Journalist materials: Videos, DVD, news- paper articles, etc	Media interested and wiling to cooperate Coverage of the mercury mining in Khaidarkan done in a professional manner
	4.2 Number of local inhabitants participating in the study on social impacts of transition to nonmercury alternatives identified	# of local inhabitants participating in the social impact study	No report of social impacts of transition to non-mercury alternatives	200 inhabitants participating in the study on social impacts of transition to non-mercury alternatives	600 inhabitants participating (through surveys, workshops, etc) on the social impacts study on non-mercury alternatives	Report on social impacts available in UNEP's website	Report to be endorsed by national authorities Local people available and willing to participate
	4.3 Number of events/ activities to raise awareness and disseminate information to key stakeholders: a) government; (decision making officers)b) research institu-tions; c) private sector; d) local residents; e) journalists	# of events	No awareness raising participatory activities known	At least 10 events (workshops, seminars, training sessions, etc), 2 per stakeholder group	At least 20 events (workshops, seminars, training sessions, etc), 4 per stakeholder group	Reports of the event available Record of assistance	Key stakeholders interested in participating in project events/workshops
	6.4 Number of awareness raising materials (mercury information kits) in local language developed	# of awareness raising materials developed # of awareness raising materials distributed	3 awareness raising materials developed by intergovernmental organizations	10 awareness raising materials developed 200 awareness raising materials distributed	20 awareness raising materials developed 500 awareness raising materials distributed	Materials available	Materials address key concerns from stakeholders

from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF/LDCF/SCCF/NPIF RESOURCES

Position Titles	\$/Person Week*	Estimated Person Weeks**	TOTAL	Tasks To Be Performed
For Project Management				
Local				
Project Coordinator Project team	500	100	50,000	day to day supervision and coordination of the project
International	Г			
Management will be located in Bishkek				ing undertaken in Khaidarkan. Please note that the om the Project team or project coordinator
For Technical Assistance* Local				
Consultant for socio-economic analysis and priority alternatives	850	77	65,000	Consultancy required to develop a detailed socio- economic study on mercury mining alternatives and to identify priority alternatives
Consultant on environmental and health impacts	850	47	40,000	Consultant required to carried out an study on environmental and health impacts of mercury in nearby populations
Consultant to update the action plan on mercury	850	35	30,000	Consultant needed to update the Action Plan, in close consultations with the stakeholders involved and the community
Consultant on awareness raising and public transparency	850	53	45,000	Consultant required to carry out an intensive campaign on awareness raising and specific training on mercury effects, risk management and prevention to different groups: workers, journalists, private sector, government, research institutions, etc.
International				
Consultant for socio-economic analysis and priority alternatives	2500	4	10,000	Consultancy required to support the development of a detailed socio-economic study on mercury mining alternatives and to identify priority alternatives
Consultant on environmental and health impacts	2500	2	5,000	Consultant required to support the development of a study on environmental and health impacts of mercury in nearby populations
Consultant to assist with updating the action plan on mercury	2500	4	10,000	Consultant required to assist with the update of the Action Plan, in close consultations with the stakeholders involved and the community
Consultant(s) to develop and implement an awareness raising strategy for mercury management to different stakeholders and to produce awareness raising materials	2500	4	10,000	Consultant required produce awareness raising materials in different languages and to bring international experts to support the awareness raising strategy on mercury management in the Kyrgyz Republic.

Justification for travel, if any: Some international consultants will need to travel to the Kyrgyz Republic to perform specific trainings and make specific interventions. Travel costs will be included in the consultancy rate.

^{*}Some activities such as 2.3, 3.1 abd 4.1-4.3 will be developed through sub-contracts.

^{*}Provide dollar rate per person week.

^{**}Total person weeks needed to carry out the tasks.

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

- A. EXPLAIN IF the PPG objective has been achieved through the PPG activities undertaken.
- B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY:
- C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

		G				
Project Preparation Activities Approved	Implementation Status	Amount Approved	Amount Spent To date	Amount Committed	Uncommitted Amount*	Co-financing (\$)
	(Select)					
	(Select)					
Total		0	0	0	0	0

^{*}Any uncommitted amounts should be returned to the GEF Trust Fund. This is not a physical transfer of money, but achieved through reporting and netting out from disbursement request to Trustee. Please indicate expected date of refund transaction to Trustee.

ANNEX E: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)