

**United Nations Development Programme**  
**Country: Tajikistan**  
**PROJECT DOCUMENT<sup>1</sup>**



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**Project Title:** Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region

**UNDAF Outcome(s):**

Under Pillar #3 - Clean Water, Sustainable Environment and Energy:

- National and transnational agreements and policies addressing environmental and natural resources are better designed and implemented

**UNDP Strategic Plan Environment and Sustainable Development Primary Outcome:**

**UNDP Strategic Plan Secondary Outcome:**

**Expected CP Outcome(s):** Improved environmental protection, sustainable natural resources management, and increased access to alternative renewable energy.

**Expected CPAP Output (s):** Compliance with international environmental conventions.

**Executing Entity/Implementing Partner:** UNDP Country Office in Tajikistan

**Responsible Partners:** Committee for Environmental Protection under the Government of Tajikistan

**Brief Description**

The current full-size proposal is a response to the obligations incurred by Tajikistan under the phase out schedule for HCFCs of the Montreal Protocol. It is a timely capacity building effort (with investment elements for the servicing sector) that is designed to improve regulatory measures to help address the accelerated HCFC phase-out in the medium and longer term, and to strengthen the country's preparedness for the complete phase-out of HCFCs from current use. In terms of its design it consists of the following capacity building elements:

- Component 1 (Regional information exchange and networking component), which addresses barriers associated with incomplete knowledge and awareness and which is aligned with PIF Component 1; Outcomes 1(a-d).
- Component 2 (National capacity building and technical assistance component), which targets support to the adoption of the fully completed HCFC phase-out strategy (with selected legislative options to control HCFC import/use), capacity building and supply of analytical and servicing equipment/tools for Customs Department and refrigeration technicians, modernization of HCFC re-use scheme in the country and demonstration of alternative technologies in refrigeration equipment and A/C sectors and is aligned with Outcome 2(b) - Tajikistan.

Programme Period:	2012-2015
Atlas Award ID:	00066625
Project ID:	00082745
PIMS #	4309
Start date:	March 2013
End Date:	March 2016
Management Arrangements:	DIM

Total resources required	US\$ 4,700,000
Total allocated resources:	
• Regular	
• Other:	
o GEF	US\$ 1,100,000
o Government	US\$ 950,000
o In-kind	
o Other	US\$ 2,650,000
In-kind contributions	US\$ 580,000

Agreed by the Committee for Environmental Protection under the Government of the Republic of Tajikistan:



*T. Salimov*

Date/Month/Year

Agreed by UNDP in Tajikistan:



Date/Month/Year

*07.05.13*

<sup>1</sup> For UNDP supported GEF funded projects as this includes GEF-specific requirements

*M.U. - 05.04.13*

## List of Abbreviations and Acronyms

A/C	Air Conditioner
CEIT	Countries with Economies in Transition
CFC	Chlorofluorocarbons
CIS	Commonwealth of Independent States
EU	European Union
ExCom	Executive Committee of the Multilateral Fund for the Implementation of the Montreal Protocol
GEF	Global Environmental Facility
GDP	Gross Domestic Product
GWP	Global Warming Potential
HCFC	Hydrochlorofluorocarbons
HFC	Hydrofluorocarbons
HFO	Hydrofluoroolefins
HPMP	HCFC Phase Out Management Plan
DTIE	Division of Trade Industry and Environment (UNEP)
kw	Kilowatt
IA	Implementing Agency
iPIC	Informal Prior Informed Consent
MAC	Mobile Air Conditioning
MLF	Multilateral Fund for the Implementation of the Montreal Protocol
MP	Montreal Protocol
MSP	Medium Size Project
MT	Metric Tonne
NOU	National Ozone Unit
ODP	Ozone Depleting Potential
ODS	Ozone Depleting Substance
PU	Polyurethane
QPS	Quarantine Pre-Shipment
RAC	Refrigeration and Air Conditioning
RMP	Refrigerant Management Plan
TA	Technical Assistance
TEAP	Technology and Economic Assessment Panel
TEWI	Total Equivalent Warming Impact
UNEP	United Nations Environmental Programme
UNDP	United Nations Development Programme

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## **1 Situation Analysis**

### **1.1 Global context and significance**

#### **1.1.1 Issue background and baseline**

HCFCs, a group of ozone-depleting chemicals, are used in a variety of applications such as refrigerants, foam-blowing agents, solvents, fire extinguishers and aerosols. In some cases HCFCs have replaced CFCs use due to their lower ozone depleting potential (ODP). The use of HCFCs is controlled by the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal protocol).

The Montreal Protocol was designed to reduce the production and consumption of ozone depleting substances in order to reduce their abundance in the atmosphere, and thereby protect the earth's fragile ozone Layer. The original Montreal Protocol was agreed on 16 September 1987 and entered into force on 1 January 1989. The Montreal Protocol includes a unique adjustment provision that enables the Parties to the Protocol to respond quickly to new scientific information and agree to accelerate the reductions required on chemicals already covered by the Protocol. The Parties to the Montreal Protocol have amended the Protocol to enable, among other things, the control of new chemicals and the creation of a financial mechanism to enable developing countries to comply. Specifically, four Amendments – the London Amendment (1990), the Copenhagen Amendment (1992), the Montreal Amendment (1997) and the Beijing Amendment (1999) have been made to the Protocol. Amendments must be ratified by countries before their requirements are applicable to those countries<sup>2</sup>.

The Copenhagen Amendment of the Montreal Protocol of 1992 stipulated that Article 2 countries need to reduce their HCFC consumption to 65% of their baseline in 2004, to 35% of that level in 2010, to 10% by 2015, to 0.5% in 2020 and finally achieve full phase out in 2030. The Beijing Amendment of 1999 extended control measures for HCFCs to production with a freeze in production by 2004 at the baseline. In September 2007, MOP 19 adopted the Montreal Adjustment on Production and Consumption of HCFCs, which entered into force on 14 May 2008. This requires that Article 2 countries accelerate both HCFC consumption and production reductions to 25% of the baseline in 2010.

A number of GEF CEIT countries that fall under non-Article 5 of the Montreal Protocol, are lagging in their phase-out progress. These countries are generally eligible for GEF funding in support of HCFC phase out, subject to having ratified the Copenhagen amendment, which Tajikistan did recently in 2009, partly due to the regional GEF project on HCFC data collection and formulation of HCFC phase-out strategies outlines. Tajikistan, being non-Article 5, is now therefore eligible for technical assistance.

Due to social and political instability in the years following the breakup of the Soviet Union in 1991, Tajikistan was relatively late in formally addressing the ODS issue. It acceded to the Vienna Convention in 1996 and the Montreal Protocol along with the London Amendment in 1998 and to the Copenhagen, Montreal and Beijing Amendments in 2009 bringing it up to date on assumption of all current obligations under the MP. Targeted action on the issue began in 1998 with the development of the Country Program, which was completed and adopted in 2002. This also allowed the country to

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<sup>2</sup> [http://ozone.unep.org/new\\_site/en/montreal\\_protocol.php](http://ozone.unep.org/new_site/en/montreal_protocol.php)



qualify for international assistance for CFC phase out as a non-Article 5 CEIT, eligible to receive support from GEF.

International assistance on ODS phase out began in 1999 with the inclusion in the GEF pipeline of a Medium Size Project (MSP) entitled “Programme for Phasing Out Ozone Depleting Substances”<sup>3</sup> with UNDP and UNEP acting as joint implementing agencies. The project included a project preparation grant utilized between 2000 and 2002 to carry out detailed project document preparation, develop the Country Program<sup>4</sup> and support formation of a formal National Ozone Unit (NOU) under the auspices of the Committee for Environmental Protection under the Government of Tajikistan. The project implementation phase undertaken between 2002 and 2005 consisted of two investment sub-projects and various technical assistance/capacity-strengthening sub-components.

The investment sub-project addressed phase out of CFC-12 refrigerant in a domestic refrigeration manufacturer (with additional bilateral assistance), and established basic CFC recovery and recycling capability in the refrigeration service sector. Technical assistance covered capacity building in the form of NOU support, awareness programs, training and equipment for Customs authorities, refrigeration technician training, and refrigerant management plan monitoring. In total US\$782,859 in GEF assistance was provided. Additional international support from the GEF has since been received through a UNEP administered regional capacity strengthening project for the period 2008 through 2010 entitled “Continuing Institutional Strengthening Support for CEITs to meet obligations under the Montreal Protocol”<sup>5</sup> under which Tajikistan was allocated US\$170,000 in support funds.

Tajikistan completed phase out of Annex A and B substances in 2004 and has maintained compliance with the London Amendment control measures since that time. Similarly, it has complied with control measures established in latter amendments regarding complete phase out of Methyl Bromide even though these were not acceded to until 2009. The only current consumption of ODS in the country is HCFCs, entirely in the form of HCFC-22 utilized for refrigeration servicing.

Specific first-stage assistance for HCFC phase out, as documented below, was provided under the recently closed regional GEF MSP with a national allocation of US\$37,500. In terms of initial response to the GEF-4 cycle programme, a draft strategy document (HCFC phase-out strategy for Tajikistan) was developed in partnership with the Committee for Environmental Protection under the Government of Tajikistan and National Ozone Office, and was formulated as part of this regional GEF project with UNDP acting as the lead implementing agency for Tajikistan in partnership with UNEP.

The main objective of the strategy was to help ensure that the country would be in respect of the obligations assumed under Decision XIX/6 of the Parties to the Montreal Protocol on the accelerated phase out of HCFCs, and that this strategy would form the basis for an intervention on continued capacity building in the country to implement the Montreal Protocol and investment support to strengthen national capabilities in dealing with HCFCs.

The results of the detailed survey work undertaken in the above mentioned outline have identified that 2009 actual consumption was 3.6 ODP tons (65 ODS tons of HCFC-22) which is entirely used to

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<sup>3</sup> <http://www.gefonline.org/projectDetailsSQL.cfm?projID=15>

<sup>4</sup> “National Programme: About Measures on Implementation of the Vienna Convention on Ozone Layer Protection and the Montreal Protocol on Ozone Depleting Substance” Committee for Environmental Protection, Adopted by Government Statement N477, March 12. 2002

<sup>5</sup> <http://www.gefonline.org/projectDetailsSQL.cfm?projID=3185>

service the bank of HCFC based refrigeration and air conditioning equipment in the country. It is estimated that 78% of this consumption is for air conditioning equipment, the majority of which are small units primarily in domestic use. The remaining consumption is in servicing commercial refrigeration equipment (20%) and transportation refrigeration (2%). Overall, 67% of the country's refrigeration and air conditioning equipment operates on HCFCs, meaning that a rapid reduction in supply of HCFCs as would be required under current Montreal Protocol obligations would have the potential to cause substantial social and economic disruption.

It was further clearly noted that this consumption has been growing over several years, largely due to servicing demands from the growth in the number of HCFC based refrigeration and air conditioning equipment, and particularly imported small domestic air conditioners. The most recent official data for 2009 indicated that this consumption had stabilized and was beginning to decline – which showed either saturation of the market or the consequences of the global economic slowdown, the latter being the most realistic scenario. The survey work also documented the current regulatory regime governing ODS, as well as current technical and institutional capacity to effectively manage its import, distribution and use.

Preparatory activities further resulting in HCFC Phase-Out Strategy also investigated the relatively low 1989 baseline assigned to the country - which has imposed severe challenges in achieving compliance with accelerated phase out obligations after 2010 - and in this regard, it was determined that a substantial quantity of ODS consumption that should have been applied to the baseline was missing and never accounted for. A case for revising this baseline was presented as one of the important results from the initial Strategy and has served as the basis for formulation of a request in view of an amendment to its current baseline from 6 to 18.7 ODP tons, based on documentation of historical ODS consumption not accounted for when the original baseline was set by the MP. This request was prepared following established procedures, scrutinized by various Montreal Protocol authorities and approved by the Meeting of the Parties in November 2011 in Bali, Indonesia (ref: Decision XXIII/28 of MOP-23).

The strategy provides a detailed description of the country's current regulatory framework (specifically, control measures applied to HCFCs) and historical reporting of HCFC consumption based on the country's established import licensing system. Using an analysis of regulatory control data related to HCFC consumption and direct surveys applied to distributors and end users of HCFCs, consumption estimates have been updated and the nature of that consumption by application, sector and region have been characterized. Likewise, analysis has been undertaken for HCFC based equipment and products and on the utilization of non-ODS alternatives and technologies in the country.

Overall, the country has demonstrated what a relatively small country of modest means can achieve in effectively meeting the highest levels of global control measures under the Montreal Protocol applied to developed countries even though its situation is much more comparable to low income developing countries. The effectiveness of relatively small amounts of international assistance mobilized by the GEF initially was highly effective in supporting this and shows that even in a low income CEIT, the institutional capacity to continue ODS phase out efforts can be sustained with this initial stimulation. This is evidenced by the continued phase out compliance over the last five years largely supported by the country on its own, although modest institutional strengthening funding has been important.

However, an important parallel lesson is that with only initial one time funding for key institutional and human resource capacity activities it is difficult for such CEITs to sustain efforts indefinitely and degradation of this capacity will effectively and eventually develop. This may result in associated risks to continued compliance and difficulty for the country to meet new compliance obligations such as is now the case for accelerated HCFC phase out as required of a non-Article 5 country.

While the country remains a small consumer of HCFCs, exclusively in the refrigeration servicing sector, its geographical location exposes it to ready access to affordable HCFCs and HCFC based equipment to meet increasing demand in the country and potentially to transshipment from elsewhere in Central Asia and the CIS generally. To address this it seems evident that a renewed emphasis should be placed on upgrading regulatory, Customs control and enforcement, and refrigeration servicing capacity, all of which have to a greater or lesser degree been declining. In particular, the country needs to expand its regulatory controls consistent with the non-article 5 country control measures, renew its customs control and enforcement capacity for ODS, and perhaps most importantly ensure that human resources and technical capacity for effective refrigerant management is in place. The latter would include ensuring capacity to accommodate the anticipated increasing emphasis on use of low GWP refrigerants.

A key element of developing the HCFC phase out strategy is examining potential scenarios respecting future HCFC consumption. The aspect that will impact the forecast is the country's economy and overall growth potential, noting that the increase in HCFC consumption generally over the last decade has been stimulated by the relatively strong economy (GDP growth averaging 8.6% in this period). From 2004 to 2008, the official consumption had grown on average 5.6% per year, although the rate of growth has been progressively declining. This corresponded to an average GDP growth of 7.4% in the same period. However the official consumption reported in 2009 showed a significant decrease in consumption to 50.5 ODS tons<sup>6</sup> of HCFC-22 (28%), which corresponds to some degree to a decline of 2009 GDP to 3.4%. The World Bank currently forecasts that growth will gradually improve with predicted GDP growth of 4.0% in 2010 and 5.0% annually through 2013<sup>7</sup>. All these data suggest a potential increased reliance on HCFCs in the country in future.

While the draft strategy is presented as an Annex to this submission and can be referred to for a more detailed description of the baseline situation (which cannot be repeated here due to the size limitations), the following key statistical observations on HCFC consumption patterns that can be made from this survey information are succinctly described below:

- Overall national consumption estimated for 2009 (on the basis of survey results) is 50.5 ODS tons of HCFC-22;
- HCFC consumption is predominately in the capital city of Dushanbe (56%) with 26% occurring in the Sugd Region and lesser amounts elsewhere.
- The A/C sector is the main source of HCFC demand nationally accounting for 78% of overall consumption, and, within the sector, smaller units (<5 kw) are the dominating source accounting for 64% of overall demand and between 80% and 90% of the A/C servicing demand within regions.

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<sup>6</sup> 50.5 tons includes 47.3 tons of new HCFC-22 and 3.2 tons of imported recycled HCFC-22

<sup>7</sup> World Bank Country Assistance Strategy FY10 –FY13, Report No. 50769-TJ, April 2010

- In the commercial refrigeration sector, the cheapest current options on the market are re-conditioned used HCFC-22 based equipment imported primarily from Russia, although often originating elsewhere.
- The transportation section remains a minor contributor to national consumption.
- The cost of non-ODS equipment versus HCFC based equipment varies with a cost premium of between 20% to more than twice applying for non-ODS units.
- The annual loss rate or servicing demand varies between equipment types and capacities but is generally quite high and tends to increase with equipment size (perhaps reflecting maintenance practice) and in the southern region of the country where higher ambient temperatures occur. Overall, it is felt that the high loss/recharge rates reflect the absence of preventative maintenance and general availability of technician recovery/re-charge equipment.
- The cost of HCFC-22 remains low relative to all alternatives being between two and three times lower than the most common non-ODS alternatives (i.e. R-600a, HFC-134a, HFC-404a and HFC-410a) and this limits proliferation of non-ODS alternatives
- Notwithstanding the low penetration of non-ODS technology in general use, there is wide familiarity with some of them and their application (ammonia), as well as a functioning commercial system that would allow ready access should a demand exist.

Given the concentration of HCFC consumption in the servicing sector, the country has to expect creation of an HCFC consumption bubble (latent demand) in the medium to longer term due to future increased need for equipment servicing due to more frequent equipment failures, especially household A/C splits.

To summarize, the HCFC Phase-Out Strategy detailed a path for meeting the required phase out schedule through to 2020 when HCFC consumption phase out in non-Article 5 countries is to be substantially completed. This path requires to have the following key components in place in order to facilitate success: i) proposing a revision to the current compliance baseline (which was successfully completed and accepted by MOP); ii) development and implementation of additional regulatory controls on import and use of HCFCs and HCFC based equipment; iii) strengthening and sustaining human resource capacity for customs controls and refrigeration servicing; iv) refrigerant management system development; and v) equipment retrofit/replacement including demonstration and promotion of low GWP technology.

The current full-size proposal – a regional GEF Full Scale Project (FSP) - builds on past CFC phase-out efforts and recent preparatory activities, and is entitled “Initial HCFC Phase Out Implementation in the CEIT Region”<sup>8</sup>. It represents a package of technical assistance to help the country address HCFC related challenges and is a response to the obligations incurred by Tajikistan under the phase out schedule for HCFCs of the Montreal Protocol, as amended by the Copenhagen amendment and the subsequent adjustment adopted by the Parties to the Montreal Protocol at MOP 19 in September 2007. Respectively, it is a timely capacity building effort (with investment elements for the servicing sector) that is well placed to improve regulatory measures to help address the accelerated HCFC phase-out in the medium and longer terms, and to strengthen the country’s preparedness for the complete phase-out of HCFCs from their current use.

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<sup>8</sup> <http://www.gefonline.org/projectDetailsSQL.cfm?projID=4102>



All of the above mentioned interventions and others designed by the PPG team in response to detailed stakeholder discussions are proposed for implementation and presented in detail in this proposal. As documented previously, this project provides a rapid follow up to the previous GEF regional HCFC project, which developed detailed survey data on HCFCs in CEITs and phase-out strategies to meet these compliance targets. Overall, this project will sustain the initial GEF-4 work in CEITs committed to move forward with accelerated phase-out, by implementing more targeted investment action as and when required, in coordination with parallel work financed in Article 5 countries in the region undertaken under the MLF. This includes end-of-life schemes in the refrigeration sector for which separate PIFs could be developed if appropriate.

Implementation of these actions will be supported by financing from GEF, along with national co-funding. The section below provides detail on the two main components.

### **Global and environmental benefits**

The principal global environmental benefit from the project is the phase-out of HCFCs import and consumption in Tajikistan to assist the country to gradually reduce dependence on HCFCs and implement its Montreal Protocol obligations.

This will be achieved directly during the project period through activities related to building the capacity of the country in controlling the imports of HCFCs and HCFC based equipment on one side and handling the demand for HCFCs by implementing HCFC re-use system on the other. Component 1 will support the country in exchanging important experiences with other Governments in the region, and, thus, improving HCFC management approaches at the national level. Component 2 will build the Government and private sectors' capacity to gradually reduce their dependence on imports of HCFCs through strengthening the equipment maintenance practices and HCFC re-use scheme. Demonstration of alternative technologies (HFC, ammonia through equipment retrofit/replacement and introduction of natural cooling techniques) in various sectors, such as commercial and A/C equipment, will help reduce barriers related to the acceptance of such technologies on the national level (performance, costs of retrofits etc) and will also lead to energy savings to generate wider interest in these and incentivize larger scale technological transitions in future when HCFCs import will be limited.

The following summarizes specific global environmental benefits attached to phase-out of HCFCs in Tajikistan that will be derived from the project:

- Country's compliance with the Montreal Protocol by phasing out 16.9 MT of HCFCs by 2015 and preparing the country's capacity to phase-out the residual consumption of 34 MT by 2020 and beyond;
- Strengthened institutional capacity of the country to improve decision-making related to HCFC phase-out approaches and to exercise effective regulatory controls over the import of HCFCs and HCFC based equipment. This will be achieved through regional experience exchange with other Parties to the Montreal Protocol from the region, improvements in the current legislation as well as through building capacities of Customs to detect HCFCs/blends at the entry points and enforce regulatory measures as required by the law;

- Resulting enhanced knowledge base in terms of information management and technical capacity to sustain planning, decision making and program execution related to HCFC phase-out, as well as engage in effective information exchange nationally and globally;
- Improved Recovery/Recycling/Reclaim infrastructure to help strengthen the HCFC re-use scheme in the country to minimize the need for HCFC import and reduce HCFC emissions into the atmosphere;
- Strengthened unwanted ODS waste storage capacity at both Customs (at the entry point for confiscated materials) and at the Refrigeration Association (at the level of service centers in support of HCFC re-use scheme and to capture unusable quantities of HCFCs and unrecognizable blends containing HCFCs);
- Improved HCFC/blends analytical capacity at the country level to resolve arguments on the content of incoming refrigerant gas in case of mislabeling of packaging and in support of the HCFC re-use system to certify the quality of recycled/reclaimed refrigerants;
- Demonstration of strong synergies between the ozone layer depletion (HCFC phase-out) and climate change benefits (reduced HCFC emissions and energy-savings) when piloting alternative technologies retrofits/replacement (and natural cooling technologies) in the refrigeration and A/C sectors and testing the system of HCFC re-use/unwanted ODS storage;
- Creating a high level of awareness by policy makers, stakeholders and the public on the need for HCFC phase-out, that will stimulate sustained attention to the issue and timely responses

In the context of inter-departmental cooperation, the project will improve collaboration between key Governmental departments (Committee for Environmental Protection, Customs, Agency for Standardization, Metrology, Certification and Trade Inspection under the Government of the Republic of Tajikistan (TajikStandard)) to strengthen overall sound chemicals management concepts. The principal global environmental benefit from the project is estimated to be the amount of avoided consumption, which would occur by achieving compliance as opposed to a base case of no action and continued growth in consumption

## 1.2 Linkages with CP, UNDAF and CCA

This project seeks to give input to the adoption and implementation of a formal HCFC Phase out strategy and action plan consistent with Decision XIX/6 and which serves as direct input to the updating of the existing Country Program on ODS phase-out. The formal adoption of Decision XIX/6 control measures within Tajikistan’s legal and regulatory system, will give practical substance to being able to achieving and maintaining country compliance as committed to by countries through their ratification of current amendments to the Montreal Protocol.

The country has ratified the Montreal Protocol and all its amendments as indicated below and therefore has fully assumed these obligations which form the basis for national level action for HCFC phase-out on the national level:

Convention/Agreement	Signature	Ratification/ Accession (a)
Vienna Convention	n/a	06/05/1996(a)
Montreal Protocol	n/a	07/01/1998(a)

– London Amendment to the Montreal Protocol	n/a	07/01/1998(a)
– Copenhagen Amendment to the Montreal Protocol	n/a	07/05/2009(a)
– Montreal Amendment to the Montreal Protocol	n/a	07/05/2009(a)
– Beijing Amendment to the Montreal Protocol	n/a	07/05/2009(a)

The project has been developed to be specifically aligned with the outline of HCFC phase-out strategy that was prepared for Tajikistan and builds on the national Country Programme on ODS phase-out.

Finally, the project is consistent with UNDAF and Country Programme Action Plan through the following outcomes and outputs:

- UNDAF (2010-2015) outcome:

Principles of sustainable development integrated into country policies and programs

- Country Programme Action Plan (2010-2015) outcome:

Increased availability of institutional products and services for the conservation and sustainable and equitable use of natural resources

- Country Programme Action Plan (2010-2015) outputs:

Concrete interventions on sustainable natural resources use, including water, land, biodiversity resources, and on climate change (mitigation, adaptation and carbon financing) complemented with environment education/ training component.

### 1.3 Key Barriers

Tajikistan, while proactively assuming national obligations under the Montreal Protocol has faced some gaps related to lack of technical assistance to continue with the successful implementation of such obligations that emphasizes the need to international support. At a more specific level, the following major barriers can be identified and which are being explicitly targeted in the project's design:

- *Wide fragmentation of the servicing sector with resulting low level knowledge and skills of refrigeration mechanics (technicians):* With the closure of previous CFC related programmes, the level of awareness at the technical level has generally reduced due to significant fragmentation of the servicing sector (many individual workshops). The proliferation of new HCFC/HFC/HC blends requires additional capacity building and specialized trainings for technicians and equipment service centers;
- *Refrigerant management capacity:* The A/C sector is the main source of HCFC demand nationally accounting for 78% of overall consumption. Therefore, the country's overall capacity in refrigerant management needs to be improved and maintained to reach sustainable efficiencies of the HCFC re-use system through well equipped and skilled refrigerant recovery, recycling and reclamation

processes. In combination with legislative improvements on sound refrigerant management (certification, modern servicing requirements, registers etc), the servicing sector is expected to be substantially strengthened to sustain future reductions in HCFC imports;

- *Continued illegal trade in ODS and mislabeling of containers:* There are reported seizures of illegally imported HCFCs and lack of dedicated storage capacity to place such wastes. Gas analytical equipment that is utilized by Customs to detect controlled gases is outdated and requires replacement. As there is a range of chemicals (HCFCs, HFCs and HCs) that enter the country, new analytical equipment should be supplied to deal with a range of chemicals as well as various mixtures. The existing general storage houses at Customs are not suited for special gaseous substances and require urgent upgrades.
- *Limited institutional capacity and networking with other Parties:* There is no longer any institutional support that is provided to the National Ozone Office (NOO) and this limits the country from participating in regional knowledge sharing platforms and collaboration with other Governmental partners to assimilate and implement best available approaches/practices in controlling HCFC import and phase-out. In order to help the country stay up-to-date with the current developments of the Montreal Protocol, assistance is required to continue regional and sub-regional cooperation of NOOs and other project partners such as Customs and refrigeration association.
- *Absence of effective regulatory instruments to limit import of HCFC containing equipment that creates a long-term HCFC “consumption bubble”:* The necessary detailed regulations to ensure that HCFC based split-systems (which constitute the main issue) are no longer allowed into the country remain to be put in place. Such controls will help avoid creation of a long-term problem with the availability of a large number of HCFC based equipment in the country that would require frequent repairs in the future while the country will face limited imports of virgin HCFCs and HCFC blends to comply with the provisions of the Montreal protocol on reducing HCFC consumption in 2015 and beyond.
- *Limited availability of technical tools to test gas composition and quality as well as to limit emissions of HCFCs during equipment maintenance:* There are gaps in technical capacity in the form of required analytical capability to test the content and quality of incoming HCFCs as single substances and in blends. Previously supplied portable analytical equipment is seriously outdated as it deals with the identification of CFCs, HFC-134a and in some cases HCs only and is generally out-of-order due to elapsed operational time since its supply in the beginning of the previous decade. It should be replaced with modern multi-gas analyzers, and the capacity of the country to perform more sophisticated tests using modern GCs should be further strengthened in support of HCFC re-use system. The overall tooling of the servicing sector is also limited to previous R/R equipment supplies with such equipment having exceeded its allowed operational life-cycles. The country is in urgent need to receive additional assistance in terms of recovery/recycling/reclaim equipment and tools able to handle a range of HCFCs and their blends and alternatives.
- *Limited exposure to alternative technologies and understanding of energy-saving aspects of new modern equipment operational on new technologies:* The smooth phase-out of HCFCs is closely linked to the introduction of alternative technologies. In Tajikistan, this is related to the servicing sector where technology substitution is limited in terms of affordable costs to mainly HFCs. A range of demonstration projects, preferably with low GWP impacts, where technically feasible, stimulation of local equipment assembly and post-installation maintenance, implementable in practice is essential and very timely.

## 1.4 Stakeholder analysis

During the formulation of the HCFC phase-out strategy and preparation of the current project a stakeholder analysis was performed which is summarized below.

<b>Ministry/Department</b>	<b>Function</b>
Committee for Environmental Protection under the Government of Tajikistan	Develops and implements policies for environmental protection, conservation of biological diversity and forest ecological systems, rational use of natural resources, sustainable development of mountain areas and assure the state's ecological security. It organizes and implements government control over environmental protection and natural resources use; implements multilateral environmental agreements (MEAs); and licenses uses, releases, transport, storage and disposal of toxic materials and waste, including radioactive.
State Customs Department	Regulates exports and imports of chemical substances and toxic wastes. The department has been a traditional Governmental partner in previous CFC phase-out programmes and currently for HCFC phase-out.
Ministry of Justice	Carries out governmental registration of all normative-legal statements related to chemical management.
Agency for Standardization, Metrology, Certification and Trade Inspection under the Government of the Republic of Tajikistan (TajikStandard)	Issues and monitors the implementation of standards. The importance of the Committee is in development and introduction of standards for the use of HCFCs, HFCs and alternative technologies as currently only old former Soviet Union's standards for CFCs, HCFC-22 and ammonia are available.
Ministry of Education	Supervises formulation and adoption of the occupational training and educational curricula for the purposes of the project and capacity building to achieve more effective HCFC control.
Refrigeration Association	Unites major actors in the equipment servicing sector and serves to disseminate experiences and best practices in the sector, serves representation, organizational and client interest protection functions. Members are involved in assembly, design, delivery, maintenance of refrigeration and air conditioning equipment
Private sector (servicing, equipment assembly)	Consume and depend on HCFCs. These sectors are the ones primarily impacted by HCFC phase-out, and their cooperation is essential for the project progress.

The project will be implemented in close coordination and collaboration with relevant government institutions, regional authorities, industries, public and local authorities and NGOs, as well as with other related relevant projects in the region through enhanced networking.

There are a number of related international initiatives in Tajikistan and regionally with which this project will coordinate activities.

The following lists these specific initiatives:

- Regional MSP GEF/UNDP/UNIDO/UNEP/WB: "Preparing for HCFC phase out in CEITs: needs, benefits and potential synergies with other MEAs: Bulgaria, Kazakhstan, Ukraine, Tajikistan, Belarus, Uzbekistan, Azerbaijan and the Russian Federation" which has been instrumental in collecting HCFC consumption related data and formulating draft outlines of HCFC phase-out strategies for the involved countries;



- Regional FSP GEF/UNDP: “Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region: Ukraine, Belarus, Tajikistan and Uzbekistan” is currently under formulation (last stage) and helps develop approaches to HCFC phase-out in the region through future regional information and experience exchange;
- MLF/UNDP/UNEP project on implementation of HPMP (HCFC phase-out management plan) in Kyrgyzstan (Stage 1 until 2015), which was approved in 2010 and is currently under implementation. The project has been designed to explore similar activities;
- MLF/UNIDO project on implementation of HPMP in Turkmenistan (Stage 1 until 2020), which was approved in 2010 and is currently under implementation. The project has been designed to explore similar activities;
- MLF/UNDP/UNEP project on implementation of HPMP in Armenia (Stage 1 until 2015), which was approved in 2010 and is currently under implementation. The project has been designed to explore similar activities;
- MLF/UNDP project on implementation of HPMP in Moldova (Stage 1 until 2015), which was approved in 2010 and is currently under implementation. The project has been designed to explore similar activities;
- MLF/UNDP project on implementation of HPMP in Georgia (Stage 1 until 2020), which was approved in 2010 and is currently under implementation. The project has been designed to explore similar activities;
- MLF/UNDP PRP for formulation of ODS waste destruction project in Georgia.

The project will also cooperate with other HCFC phase-out initiatives in the region once those are formulated and approved for implementation.

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## **1.5 Baseline analysis**

Due to high demand for HCFCs domestically, the country could have entered non-compliance regime starting 2010/11 and expected to remain in such position for next several years in case if no capacity building assistance would have been provided by the GEF. The recently completed HCFC data consumption investigations with GEF support have identified such compliance related challenges and provided consultative guidance to address these through a number of implementable and practical short- and long-term approaches, involving investments to support further development of the servicing sector.

In short-term, the country has been able to guard against the non-compliance situation when meeting its 75% reduction step in 2010. This was achieved through the justified revision of HCFC consumption baseline; however, it should be considered only a temporary relief, and as documented above the currently unconstrained growth in HCFC imported equipment will consequently and inevitably result in country’s inability to control the demand for HCFC chemicals in the time starting before and continuing after 2015 (90% reduction step). Therefore, in the absence of international assistance and specifically GEF funding, it is reasonable to assume that progress in implementing the formulated HCFC phase-out strategy in the country and further efforts toward compliance with the Montreal Protocol would have been minimal and limited.

Essentially, the business as usual case would be the continuation of the situation that existed previously, after the closure of old GEF/UNDP/UNEP CFC phase-out programmes and of the GEF/UNEP Institutional Strengthening (IS) project, as documented in the HCFC strategy document and with only limited and practically non-implementable legislative interventions from the Government side which would not be maintained without attention from the international community and GEF, and would likely rapidly deteriorate with time.

## 2 Strategy

### 2.1 Project Rationale and Policy Conformity

The project is designed to be aligned with GEF strategic programs and priorities, and specifically the GEF Operational Strategy for ODS. This project is a response to the obligations incurred by Tajikistan as CEITs (non-Article 5) under the phase-out schedule for HCFCs of the Montreal Protocol, as amended by the Copenhagen amendment and Decision XIX/6.

At a high level, the project directly supports the overarching GEF goal for the ODS focal area to protect human health and the environment by assisting countries to phase out consumption and production, and prevent releases of ozone-depleting substances (ODS) according to their commitments to the Montreal Protocol phase-out schedules, while enabling energy-efficient alternative technologies and practices, and consequently contribute generally to capacity development for the sound management of chemicals. In meeting this overall objective, the project was designed to address the ODS focal area's strategic programme, which is aimed at phasing out of HCFC (from production and consumption) and strengthening of capacities and institutions in participating countries. More specifically, this is in reference with the GEF Focal Area Strategy and Strategic Programming for GEF-4 document on Ozone (GEF/C, 31/10 May 11, 2007), which contains the following main objective:

- *For the period of GEF-4, the GEF will assist eligible countries in meeting their HCFC phase out obligations under the Montreal Protocol, and strengthening capacities and institutions in those countries that still are faced with difficulties in meeting their reporting obligations.*

More specifically, the project addresses the following two Outcomes of Strategic Program 1 on phasing out HCFCs and strengthening of capacities and institutions for GEF-4:

- (a) HCFCs are phase-out according to Montreal Protocol schedule, or faster, in GEF-eligible countries;
- (b) GEF-eligible countries meet their reporting obligations under the Montreal Protocol

The GEF goal and its strategic objective are directly addressed in the project objective and its overall design. Similarly the project outcomes and the indicators match the impacts and main indicators defined in the GEF strategy as related to HCFCs, and the project meets the requirements of the Strategic Program 1 in the following Indicators:

- (a) ODP adjusted tons of HCFCs phase-out from consumption – For Tajikistan, the project will achieve the reduction of 2.8 (2010 reported data) ODP tons of HCFCs;
- (b) Percentage reduction in HCFC consumption in the participating countries - The project will achieve country's compliance with the Montreal Protocol by phasing out 16.9 MT of HCFCs by 2015 and preparing the country's capacity to phase-out the residual consumption of 34 MT by 2020 and beyond;

- (c) Percentage of GEF-funded countries that meet their reporting obligations under the Montreal Protocol – Tajikistan will have sufficient capacity to meet its reporting obligations under the Montreal Protocol, thus, reducing the number of eligible countries.

In line with the GEF's requirements for the type of projects to be supported, the present project is of dual nature: (1) enabling-type of activities (such as regional Component 1 on experience exchange and networking as well as the full formulation and adoption of the HCFC phase-out strategy) and (2) technical assistance and capacity building activities (tools supply to Customs and technicians with required trainings, modernization of R/R/R capacity for larger service centers and Refrigeration Association, and demonstration of alternative technologies in the servicing sector through limited end-user equipment retrofits and natural cooling technologies for A/C sector).

Through a combination of such two approaches (regional and national), the project is expected to achieve the GEF-4 indicators listed out above and thus facilitate the country's compliance with the Montreal protocol's requirements for 2015 and prepare the country's capacity to meet future HCFC phase-out milestones.

An additional aspect that needs to be highlighted is the integration of HCFC Phase out with other global environmental priorities as promoted by both Decision XIX/6 and the GEF-4 Operational Strategy for the Ozone Focal Area<sup>9</sup> and looking forward to the GEF-5 Chemicals Focal Area Strategy<sup>10</sup> that ODS interventions are a part of. The project is aligned with and reinforces broader global environmental priorities related to climate change (through promotion of low GWP alternatives, and preparation for potential future control measures on HFCs) and the principles of sound chemicals management. HFCs, as viable and widely available HCFC replacements in the servicing sector, are expected to dominate in the phase-out process. This effectively mirrors the past and current experience in developed non-Article 5 countries. However, the anticipated rapid commercialization of a number of low GWP options in these countries, particularly the EU, will create opportunities to introduce and demonstrate these technologies as they become in more widely used and increasingly cost competitive in more mature markets. Finally, the strategy's emphasis on upgrading refrigeration-servicing capacity capitalizes on the linkage between improved maintenance and recovery practice with lower leakage rates (hence GHG emissions) and improved energy efficiency.

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<sup>9</sup> [http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF\\_4\\_strategy\\_ODS\\_Oct\\_2007.pdf](http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF_4_strategy_ODS_Oct_2007.pdf)

<sup>10</sup> <http://www.thegef.org/gef/sites/thegef.org/files/documents/GEF5%20Focal%20Area%20Strategies.pdf>

### 3 Project Goal, Objectives, Outcomes and Outputs/Activities

The overarching theme that underlies the GEF Project Scenario described below is providing the country with the tools to achieve effective compliance with respect its obligations in front of the Montreal Protocol and the objective of protecting human health and the environment by assisting countries to phase out consumption and production, and prevent releases of ozone-depleting substances.

The project design has been developed to specifically address the principal barriers identified above within the overall project component framework set out in the original PIF but with appropriate further elaboration and, where required, expansion of outcomes and outputs based on the PPG work.

In the following the two primary project components listed in the Project Framework are described along with the sub-components each of which are aligned with the outcomes and outputs as elaborated in Annex A:

- Component 1 (Regional information exchange and networking component). It addresses barriers associated with incomplete knowledge and awareness and is aligned with the PIF Component 1; Outcomes 1(a-d).
- Component 2 (National capacity building and technical assistance component) targets support to the adoption of the fully completed HCFC phase-out strategy (with selected legislative options to control HCFC import/use), capacity building and supply of analytical and servicing equipment/tools for Customs Department and refrigeration technicians, modernization of HCFC re-use scheme in the country and demonstration of alternative technologies in refrigeration equipment and A/C sectors the current absence of effective regulatory instruments and need to support ongoing institutional development and is aligned with Outcome 2 (b) - Tajikistan.



**3.1 Component 1 - Regional accelerated phase-out capacity building (GEF finance: US\$ 170,001 (including PMC – 45,000); National co-finance: US\$ 380,000); to be implemented by UNDP Bratislava Regional Center**

The component consists of four sub-outcomes to clearly identify the institutional capacity building efforts through regional networking with non Art 5 as well Art 5 countries (through MLF/UNEP-CAP assisted ECA network).

Activities are in full alignment with the original PIF design. These are listed below and their details are provided the table following this list.

Given that activities above are interlinked with similar activities in the rest of participating countries in this regional project, it is expected to achieve savings in some of the budget items such as translation of materials (in case if materials are homogeneous in thematic focus and the language of translation is common) and further publication at one source. In this sense, it is planned to utilize the remaining resources at the end of the project more flexibly giving priority to the support of additional participation of NOUs in the network meetings.

**Outcome 1(a) - Legislative and Policy Options for HCFC phase-out and control (US\$ 27,778)**

The countries are provided with information resources and the necessary level of decision maker awareness to undertake national level updating of ODS legislation, regulations, licensing and reporting systems, economic instruments and qualification requirements necessary to ensure control of HCFC import and use consistent with phase-out obligations (inclusive of quota systems).

**Outcome 1b - Capacity Building for Enforcement of HCFC control measures by customs and environmental/technical inspection authorities (US\$ 27,778)**

Russian language resource documentation and national trainers will be prepared for undertaking national working level training in Component 2 to equip customs and environmental/ technical inspection authorities in the enforcement of HCFC control measures related to import and application of HCFCs and HCFC containing equipment.

**Outcome 1c - Capacity Building for the Refrigeration Sector, Incorporation of Energy-Efficiency and GHG reduction elements (US\$ 55,556)**

User awareness tools, training modules and national trainers delivered for undertaking national working level training in Component 2 refrigeration technicians related to HCFCs and alternatives, taking Energy efficiency and GHG reductions into consideration, and enhancing the sustainability of such training by embedding it in national institutions

**Outcome 1d - Support for the development of regional institutions, capacity, and cooperation (US\$ 13,889)**

Regional cooperation, information exchange, and joint initiatives in areas of collective interest and concern, namely:

- Development of a regional network of RAC associations;
- Data collection and regional planning for ODS destruction;
- Development of robust Prior Informed Consent (PIC) mechanisms across the region;
- Ongoing and expanded participation of non-Article 5 countries in the ECA regional network.



## Component 1 - Regional accelerated phase-out capacity building (to be implemented by UNDP Bratislava Regional Center)

Outcome/Output	Description	Budget (US\$)
<b>Outcome 1(a) - Legislative and Policy Options for HCFC phase-out and control</b>		<b>27,778</b>
<b>Output 1a.1 Preparation of Russian language resource materials</b>	The materials will be prepared for use by NOUs, customs authorities and other stakeholder government agencies on the legislative and regulatory actions required for HCFC phase-out (i.e. step down quotas, bans, single use and container size restrictions, prior informed consent measures, proof of origin documentation, certification systems for technicians, and fiscal instruments to promote price equalization). In addition an assessment of the different modalities for ensuring the rapid and effective incorporation of HCFC phase-out elements and HFC monitoring in national ODS licensing mechanisms and associated regulations will be undertaken for each country.	5,778
<b>Output 1a.2 Awareness training on legislative and regulatory actions</b>	Training sessions for national decision-makers and NOUs respecting legislative and regulatory actions required for HCFC phase-out will be carried out in each of the four countries once yearly. An environmental expert (International Consultant) will be requested to prepare the required materials to be delivered during an intensive training seminar. The costs associated cover fees, travel and home based work for international expertise and costs associated with local organization of the workshops.	12,000
<b>Output 1a.3 Regional networking</b>	Regional networking between countries on implementation experience, consistency and cross border impacts related to HCFC control measures.	10,000
<b>Outcome 1b - Capacity Building for Enforcement of HCFC control measures by customs and environmental/technical inspection authorities</b>		<b>27,778</b>
<b>Output 1b.1 Russian language resource documentation and Training of National Trainer</b>	Russian language resource documentation and national trainers will be prepared and delivered for undertaking national working level training in Component 2 to equip customs and environmental/technical inspection authorities in the enforcement of HCFC control measures related to import and application of HCFCs and HCFC containing equipment.	5,000
<b>Output 1b.2 Awareness raising activities</b>	These will take place at the management level of enforcement authorities on CFC entry-point control measures, major enforcement issues involved (packaging, labeling, identification, container sizes) and collectively identify the detailed scope, trainee numbers and supporting equipment requirements for Component 2.	3,000
<b>Output 1b.3 Training of Trainers</b>	This activity aims to establish national cadres of trainers via "TOT" training of customs and environmental authority decision-making staff to enforce the HCFC control measures related to import/export, distribution, and application of HCFCs and HCFC containing equipment.	4,778
<b>Output 1b.4 PIC Network</b>	Technical support for comprehensive PIC network for ODS import/transit/export in the region linked bilaterally with major producing countries.	5,000
<b>Output 1b.5 Regional networking</b>	Networking will be implemented through exchanges between countries on implementation experience, consistency and cross border impacts related to import/export issues and related enforcement. It is expected that one cross fertilization workshop will take place per year which will allow for all participants to learn from successes and challenges in order to facilitate	10,000
<b>Outcome 1c - Capacity Building for the Refrigeration Sector, Incorporation of Energy-Efficiency and GHG reduction elements</b>		<b>55,556</b>

<b>Output 1c.1 Preparation of Russian language training manuals and information materials</b>	Preparation (and publishing and/or procuring ready sufficient number of copies in Russian) of these materials will take place in support of targeted national awareness on HCFCs and energy efficiency for leaders in the refrigeration sector (major users and service sector association representatives), NOUs and agencies responsible for certification on:	35,000
	(i) Addressing long-term HCFC demand, and benefits of energy-efficient retrofit/replacement and the use of 'natural', low GHG refrigerants;	
	(ii) Identifying the scope, trainee numbers and supporting equipment requirements for national level training for technicians in Component 2;	
	(iii) Strengthening of Refrigeration Associations;	
	(iv) Enhanced certification of service organizations and technicians; and	
	(v) Sustainable mechanisms for future training.	
<b>Output 1c.2 ToT on Best Refrigeration Practices</b>	Enhanced general best practices "TOT" training at the regional level for selected principal staff from technical universities and training centers involved in educational programmes for refrigeration technicians to incorporate handling of HCFCs, promotion of 'natural'/low GHG alternatives, energy efficiency aspects etc, with commensurate updating of national certification training curricula.	20,556
<b>Outcome 1d - Support for the development of regional institutions, capacity, and cooperation</b>		<b>13,889</b>
<b>Output 1d.1 Preparation of Russian language information materials</b>	These will be prepared on RAC technical issues, PIC, ODS destruction and other subjects of collective interest.	2,889
<b>Output 1d.2 Promotion of Information exchange mechanisms</b>	These will be actively promoted between RAC associations (i.e. web site, workshops, training/certification practice) and with major international networks and resources (i.e. IIR, AREA, ASHRA).	3,000
<b>Output 1.d3:Facilitation of regional dialogue</b>	This will focus in particular on and plans for ODS destruction including requirements for capture and secure storage and linkages to general chemicals waste management (specifically POPs/chemicals disposal) in the region.	8,000
<b>Project Management for regional component (10%)</b>		<b>45,000</b>
GEF financing of this component will be directed to international experience inputs as required, contractual services for compilation and translation of the documents as requested by the country, publication of materials in local language and facilitation of regional dialogues and networking with partner countries (including attendance of CAP assisted networks and sub-regional meetings).		
National co-financing will be provided through staff and coordination logistics related cost contributions (for example when/if the country plays the role of a host country for any of thematic sub-meetings for the rest of participating non Art 2 countries) from principal institutional stakeholders in the government (Committee for Environmental Protection under the Government of Tajikistan and Customs) involved in regulatory and import control of ODS, as well as from higher education institutions which will be responsible for technician trainings in the country in long term.		

The following section details work to be undertaken under **Component 2**, and have been numbered as per the approved PIF which alphabetically assigned Component **2(a)** to Belarus, Component **2(b)** to Tajikistan, Component **2(c)** to Ukraine and, finally, Component **2(d)** to Uzbekistan.

### **3.2 Component 2b - HPMP, National Level Capacity Strengthening and HCFC Phase Out Investment (GEF finance – US\$ 965,000; National co-finance – US\$ 2,970,000)**

This Component constitutes the major component of the project for Tajikistan and it is directed to achieve the following goals:

1. An dopted HPMP based on an accelerated phase-out strategy;
2. Implementation of national level training for the servicing sector and customs/enforcement authorities; and
3. Targeted HCFC phase out investment demonstrations projects/pilots undertaken in priority areas as described below.

It is fully aligned with Outcome 2b and is further expanded based on work undertaken during PPG phase and related to detailed discussion with national level project partners.

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#### **3.2.1 Output 2.1: Formal HCFC Phase-out strategy and action plan endorsed**

During the previously completed regional MSP project on developing the outlines of HCFC phase-out strategies for several non-Article 5 countries in the region, GEF/UNDP assisted Tajikistan with the HCFC data collection and formulation of an advanced draft of the HCFC Action Plan. The Action Plan has already assisted the country in revising its HCFC baseline in order to help country stay in compliance with the HCFC reduction milestones as scheduled by the Montreal Protocol provisions for Tajikistan. However, the adoption of the HCFC strategy and its implementation depends on additional assistance from the GEF.

Amongst the actions considered in the draft HCFC phase-out strategy are the strengthening of the capacities of environmental and Customs enforcement officers and refrigeration technicians via training (training of trainers) and equipment/tool supply, as well as specific investment activities and demonstration projects.

With the full deployment of the activities contemplated in this strategy, the country expects to have an integral control system for HCFCs, monitoring the substances from import authorization and through sale, distribution, transport, storage, treatment and recycling, among other stages. A registry for refrigerated installations that would allow the *in situ* monitoring of the management and handling of these substances will complement the control system, as well as a certification scheme for technicians.

The main activities under this output will serve to facilitate a workshop for the main line-ministries and their relevant staff and will support endorsement of a finalized HPMP, based on the accelerated phase out strategy. This will include finalization of the strategy with updated information, translation of materials and support costs to ensure the full participation of stakeholders.

The cost estimate for this activity is provided below:

	<b>GEF</b>	<b>Co-Financing</b>	<b>Total</b>
<b>Cost estimate for Output</b>	15,000	50,000	65,000



GEF financing will provide assistance for national level support to finalize the HCFC strategy with updated information, such as recent HCFC consumption trends, inputs from the regional component on final legislative options to control HCFCs import and use (HCFC equipment import quotas, improvement of inter-departmental cooperation on HCFC control between NOU and Customs, update of Customs codes etc), regional cooperation on thematic areas (such as illegal trade, mislabeling of gas canisters etc), translate the documentation into local language, hold wider stakeholder discussions on adopting the strategy in terms of a draft legislation for formal approval by the Government.

National co-financing will be based on the Governmental support to the adoption of the HCFC Phase out strategy through allocation of legal personnel to draft required legislation and detailed consultations at line-Ministries’ level and Agency for Standardization, Metrology, Certification and Trade Inspection under the Government of the Republic of Tajikistan (TajikStandard), as well as defense of the legislation at the decision-making level of authority (Cabinet of Ministers, Parliament). The overall institutional coordination role of the Government is provided to support this output.

**3.2.2 Output 2b.2: Trained working level Customs and enforcement officials, and refrigeration technicians using resources (trainers and training materials) from Component 1 with respect to legislation, regulations, customs controls, refrigeration servicing techniques, and general best practices**

The draft HCFC phase-out strategy specifies the need for additional HCFC management capacity building in Tajikistan. In order to continue building such capacities of Customs, enforcement officials and refrigeration technicians, the national component will provide for trainer-to-audience workshops and equipment supply in support of the practical implementation of such hands-on trainings. This will be done using resources (trainers for decision-makers from Customs and training materials) from Component 1 with respect to HCFC import and management control legislation and regulations (HCFC and HCFC equipment import quota system, HCFC use and registration controls at end-user level, safety standards for alternative technologies), refrigeration equipment servicing techniques (certification of technicians, equipment repair/maintenance standards, R/R/R equipment requirements), and general best-practices.

This project proposes, on one side, to strengthen the National Customs Service's ODS import control procedures and plans for this activity to be fully harmonized with the functions of the Committee for Environmental Protection under the Government of Tajikistan and other key Government stakeholders and agencies to ensure full support. Such support will allow to control the import of HCFCs and HCFC based equipment in quantities allowed by country-specific provisions of the Montreal Protocol and possess analytical, training and knowledge capacity to prevent illegal trade in HCFCs chemicals that may continue to take place in the region (and upgrade Customs’ storage capacity for confiscated HCFC materials). At the other end –HCFC consumption sector, as well, the continuity and improvement of the good practices in the refrigeration training plan is proposed for technicians and HCFC equipment service centers, in order for them to improve their practices in the daily use and handling of refrigerating HCFC gases – avoiding HCFC emissions from equipment, and thus, reducing HCFC consumption domestically which will gradually reduce the need for HCFC import.

To do so, contents of the customs training and technicians training programs will be updated and information diffusion channels will be improved to reach the largest possible number of trained technicians.

The cost estimate for the proposed GEF support is presented in the summary table below. Each of sub-items is discussed in the following sections.

	<b>GEF</b>	<b>Co-Financing</b>	<b>Total</b>
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<b>Cost estimate for Output 2.2</b>	<b>586,750</b>	<b>1,000,000</b>	<b>1,586,750</b>
<b>Customs</b>	235,750	500,000	735,750
<b>Technicians</b>	351,000	500,000	851,000

### Customs training and equipment support to enhance Customs control capability

	<b>GEF</b>	<b>Co-Financing</b>	<b>Total</b>
<b>Customs officers</b>	<b>235,750</b>	<b>500,000</b>	<b>735,750</b>
Training	45,000		
Equipment	163,750		
TA	20,000		

The HCFC Phase Out strategy preparatory work and the PPG's FSP formulation activities revealed gaps in the current capacity at the Customs level. These relate to:

- lack of regular training of Customs officers on new developments in the area of HCFC and HCFC-based equipment import control measures/procedures for packaging and equipment checks at the border which deteriorates the national level capacity to implement new coming legislation in support of the accelerated HCFC phase-out;
- outdated information and training materials;
- poorly equipped training classes in support of improving officer qualifications;
- outdated/out-of-order CFC/HCFC and lack of HFC portable analytic equipment; and
- absence of dedicated CFC/HCFC suitable storage capacity for confiscated and/or CFC/HCFC chemical or based equipment for temporary storage before Customs clearance is granted.

In order to fill in the identified gaps that prevent the effective implementation of Customs' function to control the import of HCFCs, PPG team had detailed discussions with the Customs office and agreed on the following assistance package detailed below.

For Customs, 25 advanced refrigerant identifiers will be provided for use at the principal points of entry, as well as an additional identifier and a full set of equipment and tools for use in the Customs training facility for hands-on training for the Customs agents. The supply of this equipment will also be supported by spare parts such as accumulators, filters, connecting hoses and sampling tips in sufficient quantities so as to ensure their successful and continued use for the duration of the project.

One complete set of gas analytical equipment will be supplied to the Customs Training Institute to equip one dedicated classroom for regular trainings of new Customs staff, as well as for regular updating of previously trained ones. The implementing partner has committed to allocate such a space in the Institute, equip it with required furniture for trainings, and also to ensure that a new study curricula be developed and adopted in the Institute (in coordination with the Ministry of Education) to continue with Customs training in the time beyond the project duration. The Training Institute will allocate trainers, and in combination with established training curriculum, this will make any future training of Customs officers more sustainable as compared to one-time trainings which prevailed in the past.

The Customs training component will feature three important elements:

- Training-of-trainers by international Customs specialist as provided in the regional Component 1;
- Immediate training (by trainers) for up to 100 working level Customs officers who operate in 5 main territorial Customs departments and main posts affiliated with those offices;
- Regular training of staff by the Training Institute (mandatory for all new staff and regular qualification of existing staff).

The training sessions will be from 3 to 5 days long to ensure quality delivery and practical experience with use of all materials, tools and equipment.

The equipment supply will be preceded by the initial TOT trainings for 2 – to - 5 trainers (one of which will come from the Customs training institute) as supported by the regional Component. If upon a request from the Customs Department the international trainer needs to accomplish an additional round of national training, the invited trainer will also cover a limited number of trainings of Customs officers from the central office (up to 15 officers). A number of workshops then (likely 5 given the number of the territorial Customs offices) will be supported by the project in order to deploy the trained personnel to the regions and train up to 20 personnel in each province.

This will be supported using resources (trainers and training materials) from Component 1 with respect to legislation, regulations, customs controls, refrigeration servicing techniques, and general best-practices.

The Customs has also specifically requested assistance for the improvement of its storage capacity for seized items. This office is the principal authority to seize ODS-containing cylinders or equipment that crosses the border without approved documentation. However, the warehouses currently used are general for all operations while HCFC materials/goods require a specially designated storage facility to ensure that safety standards are followed. The Customs Department does not have any specialized storage platforms for ODS chemicals/or equipment, and the project will help make basic improvements to existing storage facilities in terms of installing ventilation systems, safety signs, fire alarms, etc. Technical assistance will be provided to prepare for the upgrade of a selected warehouse to serve this purpose and then procure required materials and upgrade the existing storage at Customs to meet internationally accepted standards.

GEF financing will provide assistance, as described above, for capacity building and technical assistance to the Customs Department (and its dedicated Training Institute) to enhance the training of Customs officers, equip the department with required tools to effectively implement HCFC import controls and upgrade the seized HCFC chemical/containing goods specialized warehouse so that it meets internationally accepted safety standards.

National co-financing will focus on allocating an auditorium in the Training Institute (and associated utility fees), the inter-departmental coordination for adoption of an updated training curriculum, providing trainers from the Training Institute and their salaries during and beyond the project duration for the sustainable training of Customs officers after the project’s closure, additional investment co-finance on improving general incoming goods scanning capacity (through parallel Customs modernization programs on establishing scanners for selective identification of goods imported in bulk – in trucks - which may contain HCFC cylinders and equipment), and allocation of a warehouse to be specifically dedicated to ODS materials/equipment. The Customs Department will also engage in inter-departmental coordination work on the implementation of HCFC Phase Out strategy.

**Refrigeration technicians training and equipment support to enhance refrigeration-servicing practices**

	<b>GEF</b>	<b>Co-Financing</b>	<b>Total</b>
<b>Technicians</b>	<b>351,000</b>	<b>500,000</b>	<b>851,000</b>
Training	110,000		
Equipment	231,000		
TA	10,000		

It is widely accepted that the area of capacity strengthening which will most likely have an impact on the achievement of the accelerated phase-out is the capacity to maintain and service the current bank of HCFC containing equipment to a reasonable standard of practice.

Since finalization of the implementation of the previous set of CFC phase-out related projects in 2005, the country has not received any additional technician training and tools investment support. During the different technical visits of the PPG international team, significant gaps in servicing capacity were revealed. At the time of previous technical support programmes, the focus of assistance was on training and equipping technicians from large service centers that existed. However, since then, the servicing sector has become more fragmented and the majority of service centers disappeared and developed into a set of only a few service centers (4 centers) and many one-two man service workshops.

While some of the remaining service centers continued with limited training of in-house staff, the vast majority of individual technicians at this same time were not exposed to any additional trainings and/or experience exchange, not mentioning the lack of access to updated basic recovery/servicing tools. The Refrigeration Association, nonetheless, was able to deliver some training to interested equipment servicing enterprises and individual workshops who then applied for certification at the Committee for Environmental Protection under the Government of Tajikistan. During this period, the coverage of technicians in training reached a maximum of 5-to-10% of the total required number.

As regards the basic recovery/servicing tools and the overall tooling level of the servicing sector, this is also limited to previous R/R equipment supplies which have not only exceeded their allowed operational life-cycles, but also deteriorated with time to be in such a condition that many of them are no longer in use. The country is in urgent need to receive additional assistance in terms of recovery/recycling/reclaim equipment and tools able to meet the current market demands and to handle a range of HCFCs and their blends, as well as alternatives including hydrocarbons.

In response to these limitations, the project will support the continued training and equipment supply (tools and equipment kits) for technicians, as well as the strengthening of the Association of Refrigeration technicians (Center of Artificial Cold). The Association is expected to play a central role, as it will in particular be used as the main training delivery mechanism. Trainers and classrooms will be provided for this purpose. The Sugd region has classrooms available; however technicians from the Hatlon region, which does not currently have an available classroom, will come to receive training in Dushanbe which is located 100 km away. The training for the Gorno-Badakhshanski region (Pamir region – including an estimated 20 technicians) will require the travel of the trainer whose contract will have to include per diems, as well as rental of training facilities.

The development of such capacity will need to be coupled with the establishment of a formal certification system for refrigeration technicians and the linkage that will have to be contemplated for application of EU type refrigerant management regulations. In view of this, the training to be provided by the Refrigeration Association, upon receipt of applications from individuals to participate in such trainings, will be validated by the Committee for Environmental Protection under the Government of Tajikistan's Standardization Center who will then issue a License. This Licensing process will include provision of a basic tool kit and a Training Certificate. The Committee has issued these work licenses since 2004; however these will now be issued and valid for 5 years (starting from 2010).

The training center of the Association will in addition receive a set of modern teaching equipment (laptop with software, LCD projector and screen) to replace the outdated one received under the previous CFC phase-out programme. Standard servicing tools for hands-on training will be provided as well.

For the training of technicians carried out by the Refrigeration Association, two (2) trainers need to be selected and then trained to help with country level trainings, as and when necessary. The training of trainers will be covered under the regional Component 1. The duration of the trainings will be from 3 to 4 days. One (1) trainer will take one (1) session each (theory and practice respectively).

It is expected that approximately 440 technicians in Dushanbe and other regions will be trained. The following represents an estimate of the number of technicians per region in Tajikistan:

- Dushanbe only - 224 technicians
- Sugd region - 112 technicians
- Hatlon region (technicians will come to Dushanbe for trainings) – 12 technicians
- Gorno-Badakhshanski region - 53 technicians
- RRS (Region of Republican Subordination, close to Dushanbe) – 39 technicians

Given the fact that there are many private enterprises and individual technicians (due to fragmentation of larger institution which prevailed in the past), the country has decided that there is no need to train trainers for each individual company or workshop, as was done in the past. There are four (4) principal remaining service centers in Tajikistan which employ from 30 to 50 technicians each from the above list – this covers less than 50% of the total number of technicians in the country. These service centers, along with the Refrigeration association, will provide support in training their staff or allocating available classrooms in distant regions for the specialized trainings delivered by trainers of the Association.

It is expected that at least 1-2 trainers, from each of these 4 centers will need to be trained by the international expert, for a total of 4-8 trainers and each trainer then will train staff in the respective service centers which will also play a role in strengthening the national HCFC/HFC re-use system.

Duly trained and certified technicians who do not have access to any of the kits provided to the registered enterprises will have access to borrowing equipment and/or tools they might require to complete a given service, thus helping to ensure the use and correct application of good practices. The existing service centers and the Refrigeration Association will be obliged to grant access to this equipment for which they are responsible, to such technicians on a loan basis, otherwise the tools that will be received by such centers which remain in UNDP ownership until the end of the project, will be re-distributed to other potential clients.

In total it is expected that around 100 kits will be procured for distribution to technicians and that these will include a set of basic tools (manifold and hoses, piercing pliers, tube benders, leak detector, thermometer, voltmeter, etc.) as well as equipment (portable recovery unit, leak detector, portable recycling kit, reusable recovery cylinder, etc.) in support of best refrigeration practices.

GEF financing will support the trainings, international and national expertise for the implementation of train-the-trainer element of the project and monitoring of R/R equipment use by individual technicians and technical centers as well as strengthening of the Association of Refrigeration technicians. Further, the support will cover the supply of basic tools for refrigeration servicing sector and an update of the training curriculum for technicians.

National co-financing will be attached to the GEF support in terms of allocation of training rooms (staff time, furniture, coordination of trainings, utility fees) at the technical centers and Refrigeration Technicians Association. The trainings of technicians will be supported beyond the project duration to ensure sustainability of results on a self-sustained basis. Service centers and small workshops will co-finance the project by supporting complementary equipment (basic tools) purchase, maintenance and operational costs for the tools and equipment (inclusive of spare parts), self-training (sub-contracting of training centers) of their staff beyond the project duration on recovery/best practices in preparing refrigerated equipment – the training will involve the cost of technician certification during the project and beyond.



### 3.2.3 Output 2.3 - Targeted HCFC Phase-out Investment Program and Demonstration projects

Another principal component of the project is the investment programme that was developed in support of the following key objectives:

- Updated and expanded HCFC Recycling and Reclaim (HCFC re-use scheme) capacity at the level of larger equipment service centers and Refrigeration Association;
- Pilot HCFC equipment retrofit/replacement incentive program; and
- Demonstration of Benefits of Natural Cooling Technologies in A/C Sector

This Output will lead to the improvement of the HCFC re-use system through supply of modern Recycling and Reclaim equipment which is critically important at the stage when HCFC supplies will become limited. It will additionally demonstrate possibilities and benefits of HCFC equipment retrofit/replacement in the refrigeration (commercial/industrial) sector to disseminate information on opportunities to reduce dependence on the HCFC group of chemicals for the post 2015 period (10% reduction of HCFC baseline). It will also further demonstrate natural cooling technologies in the A/C sector that will aim to reduce A/C equipment failure and repair rates at a number of cellular phone network providers relay stations and towers and will help validate and quantify linkages to the climate change focal area in terms of achieving better energy-efficiency of new system set-ups, on a limited basis.

The cost estimate for the proposed GEF support is presented in the summary table below. Each of the sub-items is discussed in the following sections.

	<b>GEF</b>	<b>Co-Financing</b>	<b>Total</b>
<b>Cost estimate for Output</b>	<b>363,250</b>	<b>1,920,000</b>	<b>2,283,250</b>
Upgrades of HCFC re-use system	161,250	870,000	1,031,250
Pilot retrofit/replacement	87,000	200,000	287,000
Natural cooling demonstration (A/C sector)	115,000	850,000	965,000

#### Upgrades of HCFC re-use system through strengthening of R/R/R centers and improving storage of unwanted ODS capacity

	<b>GEF</b>	<b>Co-Financing</b>	<b>Total</b>
<b>Upgrades of HCFC re-use system</b>	<b>161,250</b>	<b>870,000</b>	<b>1,031,250</b>
Training (supplier as part of tender)	0		
Equipment	121,250		
Workshops	10,000		
TA	30,000		

Statistics on the recovery/recycling rates achieved highlight the importance of re-use schemes at a stage when the country, as non-Article 5 Party, is approaching further and significant reduction milestones in the import of HCFCs (2010 - 25% of the baseline and 2015 - 10% of the baseline). It is understood from previous experience that it is at this point in time that such a system, coupled with market forces, demonstrates its full potential and in general results in substantial HCFC re-use rates.

There are current limitations in technical capability and modern equipment to support effective management of HCFCs used in servicing and this project proposes the strengthening of four (4) existing recovery and recycling (R&R) centers, and establishing one new (1) regeneration (reclaim)/storage facility for ODS based gases used in refrigeration and air conditioning. Previously supplied equipment was intended to deal with CFCs only and has exceeded its capacities (lifespan, usefulness, obsolescence) and is not considered by enterprises as

meeting the needs dictated by the current blends. It is mostly out of order and/or out of demand as CFCs have been generally phased-out (only limited quantities are still being recycled).

With the proposed future import limitations for HCFCs, the gas recycling and re-use scheme is in high demand as was clearly noted during the field survey of service centers. Therefore, it is foreseen that GEF assistance will be geared towards modernization of identified technical centers which deal with installation, maintenance and repairs of ODS based refrigeration equipment and which could potentially fulfill these R/R/R functions.

It should be noted that partial assistance to such centers in terms of basic gas recovery machines and servicing tools will come from the previously described component of tools supply for refrigeration technicians. Such tools will be distributed to mobile servicing brigades as well as stationary tools to the centers, as the majority of qualified technicians work in these professional centers.

The following Service Centers will be strengthened and will receive HCFC re-use equipment:

- Sugd region (north-west): Rembyttehnika (Recovery/Recycling)
- Sugd region (north-west): Vostok (Recovery/Recycling)
- Dushanbe and surroundings: Ekaud (Recovery/Recycling)
- Dushanbe and surroundings: Volna (Recovery/Recycling)
- Dushanbe and surroundings: Refrigeration Association (1 reclaim set with GC and upgrade of its ODS storage capacity).

The Recovery/Recycling (service centers) and Reclaim Centers are expected to assist in meeting the demands for recycled and reclaimed refrigerants and in such a way will help facilitate the successful phase-out of HCFCs in Tajikistan.

These centers will be adequately equipped to assist with the HCFC based equipment retrofit/replacements to improve practical skills and experience and promote themselves as centers of excellence to backstop any future equipment retrofits in the time beyond the project's duration.

The Refrigeration Association will be supported with a multi-purpose reclaim unit with GC laboratory equipment and strengthened to accommodate the unwanted ODS storage facility. The re-usable quantities of ODS (also coming from temporary ODS storage facility located at Customs) will be further offered to the service centers or individual technicians to cover the costs of regeneration. The purified chemicals will be packaged into multi-use canisters/cylinders. Hence, a demonstration project is contemplated to set best practice example of HCFC re-use aiming to practically demonstrate the distribution of purified high quality HCFCs in re-usable containers.

Obsolete ODS recovered during the above mentioned process will be placed in safe storage in an upgraded warehouse belonging to the Association and will be held for future ODS destruction programmes. The collection of statistics on unwanted/obsolete ODS accumulation rates, will provide baseline data that will be of the utmost importance in determining what future interventions, if any, are required to assist the country in dealing with the as of yet unquantifiable stocks of obsolete ODS which will have to be either destroyed in situ, or transported for destruction to a neighboring country.

Overall, this project aims to strengthen the current ODS management capacity, and to build the necessary HCFC handling capacity, in order to ensure the country has the required tools and equipment to meet future obligations as set by the phase out schedule under the Montreal Protocol.

This is fundamentally a development project focusing on transfer of technologies and expertise (recovery, recycling, regeneration and/or storage of ODS) building on previous efforts, as well as on new ones developed and implemented in parallel, in the context of the Strategy.

The principal components under this Output will include:

- Strengthening, tooling and equipping 4 existing recovery/recycling centers. This strengthening will include an assortment of basic equipment and material to facilitate the learning process and ensure use of good refrigeration practices, safe handling, recovery and/or recycling of refrigerants, including hydrocarbons, new refrigerants and HFC blends; and
- Strengthening the capacities of the Refrigeration Association and providing it with the mandate to reclaim, refill into multi-use canisters and eventually store unwanted/obsolete HCFCs (including CFCs, HFCs and non-recognizable blends). The center will demonstrate an integrated ODS management approach that, apart from making HCFC available in its purified form without the need to increase imports, will demonstrate best practices on HCFC re-use in the country with the distribution of high purity refrigerants in multi-use cylinders to prepare the country to potentially take steps in the direction of a decision to ban single-use refrigerant containers. Although at present, and as evidenced during the field visits, the market is not ready for an outright ban on single use containers, this could help to set the stage for the subsequent reinforcement of control, both of quantities and quality, of the gases entering the country.

A additional benefit would be that these centers would be fully equipped to carry out quality HCFC equipment retrofits/replacements, which will be vitally important after 2015 when a 90% reduction in consumption of HCFC relative to baseline takes effect, and beyond.

GEF financing will mostly support capital expenditures on R/R/R equipment for servicing sectors, inclusive of laboratory GC equipment and small upgrade works on ODS storage facility for the Refrigeration Association.

National co-financing will be geared towards allocation of protected facilities by each of the participating service centers in which to place the R/R/R equipment, utility charges and equipment maintenance costs beyond the duration of the project. The centers will be planning to procure required spare parts to keep the equipment operational for the longer term – beyond the project duration. Additionally, centers have committed to regularly train their staff on the adequate use of this sophisticated equipment. The main part of co-finance is also coming from the centers’ plans to complementarily equip their mobile repair brigades with basic tools mentioned in the technicians training component - those who will not receive assistance from the GEF – approximately 50% of brigades will be equipped by the hosting centers. Technical centers will ensure that reports on R/R rates are compiled regularly by their staff and presented to the Government.

**Pilot retrofit/replacement incentive program**

	<b>GEF</b>	<b>Co-Financing</b>	<b>Total</b>
<b>Pilot retrofit/replacement</b>	<b>87,000</b>	<b>200,000</b>	<b>287,000</b>
Workshop	7,000		
Grants	55,000		
TA	25,000		

During the GEF evaluation of the RMP programme in Tajikistan, the NOU expressed intentions to include MLF-modeled end-user programmes that were pioneered by UNDP globally - including in a number of Article 5 countries in the Central Asia and Eastern Europe Region - and which were evaluated positively by the Multilateral Fund. Although such programmes have never been designed and implemented specifically in Tajikistan, given UNDPs experience in this area, it is expected that a typical end-user programme model will not only be custom tailored but can be deployed with a very likely high success rate. Such intentions by the

NOU were also communicated to the GEF Evaluation Team during the assessment of previous CFC phase-out projects, which took place in 2009.

Procedurally this end user incentives programme will be based on experience accumulated in implementing such programmes in various countries of the region including Kyrgyzstan, Armenia, and Moldova. The range of facilities to be converted would target as a first step private sector enterprises in the dairy and vegetable product storage sectors (cold rooms for meat, fruit and vegetables, as well as ice-cream processing factories).

A preliminary search has identified that the regions of Dushanbe and Sugd are the primary areas with concentrated agricultural production where the majority of cold rooms and dairy processing enterprises are located. These two regions will be used to implement demonstration programmes for the retrofit/replacement of HCFC based equipment to more modern equipment. The range of alternatives that will be allowed for demonstration would be for example HFC-134a, 404a and 507c for medium to low-temperature solutions, as well as any other low ODP, low GWP, technologically acceptable alternative available or likely to become available in the near future.

UNDP rules/procedures taken from previously MLF-supported end-user incentive programmes will be applied during the implementation of the programme – as such incentive payments would not exceed 50% of the total costs of a new replacement refrigerated packages, or of a retrofit, whichever might be the preferred option of a participating enterprise.

The basic scheme involved would be to provide a cash incentive of up to a capped amount for end users of such equipment to retrofit or replace HCFC based equipment. Selection of recipients would be prioritized based several factors including: i) equipment size (refrigerant capacity); ii) direct climate impacts of the selected refrigerant technology; and iii) energy efficiency gains. The scheme would be supported by appropriate technical assistance with regards to options and administration of the scheme.

Some of the factors taken into account when determining that for Tajikistan this approach could meet with a high success rate were the following:

- In the case of industrial/commercial refrigeration (less than 200 kw), HCFC-22 actually accounts for 94% of refrigerant use;
- The cost of HCFC-22 remains low relative to other alternatives (between two and three times lower than the most common non-ODS alternatives i.e. R-600a, HFC-134a, HFC-404a and HFC-410a);
- The cost of non-ODS equipment versus HCFC based equipment varies with a cost premium of between 20% to more than double;

In addition it has also become apparent that except for household refrigeration equipment, there is only limited local availability of non-ODS equipment on the market.

The programme will be initiated by an inception workshop and it is expected that 2 to 6 companies could eventually be invited to participate in a first stage.

The resulting effect from this limited demonstration programme would be dual.

Firstly:

- In the refrigerated equipment replacement scenario the intention is to demonstrate to a varied and wide audience including technicians as well as importers and distributors, the added benefits of up

to date modern cooling equipment such as: robust and reliable operation, improved operating conditions, decreased need for refrigerant top ups and, energy-savings;

- In the retrofit scenario, the project will demonstrate retrofits (preferably with drop-ins of non-HFC based blends, where technically possible, or of HCF blends) with the help of locally available engineering companies (service centers listed above), and will help to quantify/measure the equipment performance and the costs of such operations to better inform and raise the awareness of the wider community of HCFC equipment owners regarding such solutions, for future consideration.

The second effect would potentially lead to effectively reducing knowledge barriers in order to enlarge the scope of equipment retrofits and replacements. Local engineering companies (R/R/R service centers) will in time get acquainted with the specifics of such operations in local climatic conditions, and they will then be able to offer such expertise to HCFC equipment operators on self-recovery economic principles. Such a transition from a limited number of pilot equipment retrofits/replacements to a wider scale is expected to take place after 2015 when the importation of HCFCs will be not only further reduced, but severely curtailed, to comply with obligations of the country towards the Montreal Protocol. R/R/R centers will also be in position to consider the introduction of drop-in non-ODS replacements, where technically possible and applicable, as well as to monitor the equipment performance.

Upon project completion a final workshop would be held to report on the overall results for commercial/industrial enterprises to demonstrate the benefits (low costs for retrofits, durability of equipment in case of replacement, performance of drop-ins in hot climatic conditions and associated costs, and higher energy efficiency for replacements, etc.). This project will effectively provide, after a reasonable time has elapsed, valuable data, which can then easily be linked to overall transition to alternative technologies and achievements of energy savings.

GEF financing will provide for partial financial incentives for the retrofit/replacement of HCFC based equipment on a limited scale. It will further be utilized for information dissemination tools such as workshops and mass media communications. Finally, it will cover technical support by both national and international expertise to ensure smooth implementation of the programme.

National co-financing will consist of equipment retrofit/replacement co-finance resources leveraged from participating enterprises.

### **Demonstration of Benefits of Natural Cooling Technologies in A/C Sector**

	<b>GEF</b>	<b>Co-Financing</b>	<b>Total</b>
<b>Natural cooling demonstration (A/C sector)</b>	<b>115,000</b>	<b>850,000</b>	<b>965,000</b>
Equipment	45,000		
TA	45,000		
Regional workshop	25,000		

As evidenced above, the main HCFC consumption in the country takes place in the refrigeration-servicing sector and, within that, the A/C sector is the dominant consumer. HCFC use strongly dominates all sectors except domestic refrigeration, MAC and commercial/industrial refrigeration. The above is most pronounced in the A/C sector which is the main area of refrigerant use and where market penetration of non-ODS based equipment is limited to 2% of overall refrigerant requirements. Additionally, the penetration of non-ODS technology generally is quite low suggesting that emphasis needs to be placed on facilitating its preferred use for future installations.

As reported in the HCFC Phase-out Strategy, more than 95% of the A/C systems currently operating in the country were manufactured based on HCFC-22. Out of that number, 70% of the split-system types of air-conditioners are owned by the population, and the rest are in use by the different cellular network providers.

In order to stop extensive future proliferation of household split systems in the country, the Government plans regulatory actions to ban the import of such equipment in 2015. It is contemplated that this measure will also impact the type of split and column A/C equipment currently used by cellular network providers to operate their switchboards and base/relay stations within their ideal range of required indoor temperatures. These regulatory actions aim to prevent the build-up of latent demand due to the creation of an inevitable future consumption bubble from increased numbers of such equipment becoming available in the country, and hence of an infernal spiral of more frequent breakdowns and increased demand for HCFCs.

The equipment currently used by such enterprises is based on HCFC-22 in its great majority, although there are new trends which indicate that the companies, when establishing new stations, will be opting for HFC-410a based equipment which has been reported to break less frequently than cheaper HCFC-22 based ones.

On the other hand, all of equipment operated by the cellular network providers is used more extensively during a day, as compared to home-based split systems. For comparisons sake, household systems are used on average for 2-5 hours a day, and the ones stationed in the switchboard/relay stations are utilized 18-22 hours a day. This is imperative in order to keep the indoor operating temperature of this sensitive communication equipment at a required level of +19 to 24 C by cooling when prevalent higher temperatures conditions are present (spring, summer, fall) and by heat exchanging with lower outside temperatures in colder seasons (winter).

The intense utilization of this type of equipment reportedly leads to more frequent failures in systems throughout the year. According to a servicing company's estimates for one cellular network provider, one unit of A/C equipment normally breaks down once a month during medium (spring, fall) to hot temperatures (summer) and this equipment breaks down less frequently in wintertime. However, the main reason for any of the failures are the frequent cut-offs in electricity supply in some of the regions of the country. Due to the large number of repairs on A/C equipment, companies, conscious of the need to reduce operational expenses and improve their competitiveness, have started searching for different solutions to this problem.

One attempt to determine how the operational time of the A/C systems could be reduced was taken onboard by one of the refrigeration engineering centers in partnership with a lead Tajikistan owned cellular company. The work mostly concentrated on switchboards located in Dushanbe, and locally assembled natural cooling systems, which start operating when outside temperatures are above 22 C° (spring, fall, beginning/end of summer at early morning/evening and night times), were introduced to test under field conditions.

As a result of the tests it appeared that the number of fixes on A/C equipment located at switchboards was dramatically reduced, which represents substantial savings and improvement in hot climatic conditions such as those in Tajikistan. In addition, significant energy savings were achieved by using a combination of the natural cooling concept (a low-energy consumption air pump/dust filter combination with an additional roof protection for the A/C systems to avoid heat-up (direct sunlight pushes operational temperature to 75C° and the roof protection decreases it down to 55C° – 60C°). However, it was difficult for the local engineering companies to come up with local solutions for the extremely specialized and sensitive base and relay stations due to the inability to produce the high-quality, washable dust filters required, given the dry and dusty conditions that the stations are operated in. And, the application of such a concept was limited to urban conditions and did not consider the deployment of dust filters (main switchboards), which was found to be a main barrier to expanding the application of natural cooling principles to relay/communication stations located in the regions.

During the PPG, the project team discussed an opportunity to expand a number of tests to relay stations located across the country. Two cellular communication companies, Babylon (100% Tajik ownership) and T-Cell

(100% Turkish ownership) agreed to provide a few sites for the purposes of demonstrating the natural cooling concept. The two companies will provide their established or newly planned sites with communication equipment cooled by HCFC-22 A/C systems. The companies' equipment monitoring system and staff responsible for maintenance of base/relay stations will support data collection on the performance of the new technological solution and record operating parameters and A/C failure rates. Finally, companies' management agreed to bear risks related to malfunctioning of the equipment (air filters fail in dusty conditions, tests do not progress as planned, etc.).

The project will support sourcing a qualified international company that produces such natural cooling systems (one of the important points during tender procedures would be to have easily washable filters to avoid the increase in operational costs). Cellular companies would like to test such systems in several locations (town setting, village in the mountains, semi-desert and conditions at different altitudes). The resources in this component will be used to design and supply the air pumps (with filters) and outer liners (or boxes) to be attached to pre-fabricated relay/base stations. In terms of information dissemination of the results of the demo project, firstly, the project would support a regional workshop. One of the companies also arranges annual trainings and conferences for sister companies from the region and globally, and if the results of the demo are promising, they (Babylon) have committed to use their own resources for further dissemination of information through their channels.

GEF financing will provide assistance to procure demonstration equipment for natural cooling and implementation support in terms of national and international expertise to facilitate the programme's implementation. A regional results dissemination workshop will be a part of GEF assistance.

National co-finance will be comprised of commitments from participating cellular network companies (Babylon and T-Cell) to provide platforms for the pilot projects –current and future investments into existing and planned telecommunication centers and sites to suit the pilot project requirements, inclusive of local engineering works to adjust site boxes for the technological improvements. Furthermore, companies will assign responsible technical staff to monitor the performance of new technologies and run operating expenses related to the sites where technological fixes or optimizations will be required. Some of the participating companies also commit to disseminate positive results through their established channels.

### **3.3 Component 3 - Monitoring, learning, adaptive feedback, outreach and evaluation (GEF finance – US\$ 35,000)**

This component links to Outcome 3, namely that the project results are sustained and replicable with outputs being i) M&E and adaptive management applied to project in response to needs and extract lessons learned (Output 3.1) and ii) Lessons learned and best practices are replicated at the national level (Output 3.2). Details are provided in Part I Section H: Budgeted Monitoring and Evaluation plan.

The table below provides a summary cost estimate covering the proposed GEF scenario by Component and Sub-Component described above:

Project Outcome	Outputs	Cost (US\$)		
		GEF	Co-financing	Total
<b>Component 1: Reducing the HCFC Servicing Demand - Regional Accelerated Phase-out Capacity Building (to be implemented by UNDP Bratislava Regional Center)</b>				
<b>Outcome 1a: Legislative and Policy Options for HCFC phase-out and control</b>	Output 1a.1: Preparation of Russian language resource materials	<b>27,778</b>		
	Output 1a.2: Awareness training on legislative and regulatory actions			
	Output 1a.3: Regional networking			
<b>Outcome 1b: Capacity Building for Enforcement of HCFC control measures by customs and environmental/technical inspection authorities</b>	Output 1b.1: Russian language resource documentation and Training of National Trainer	<b>27,778</b>		
	Output 1b.2: Awareness raising activities			
	Output 1b.3: Training of Trainers			
	Output 1b.4: PIC Network			
	Output 1b.5: Regional networking			
<b>Outcome 1c: Capacity Building for the Refrigeration Sector, Incorporation of Energy-Efficiency and GHG reduction elements</b>	Output 1c.1 Preparation of Russian language training manuals and information materials	<b>55,556</b>		
	Output 1c.2 ToT on Best Refrigeration Practices			
<b>Outcome 1d - Support for the development of regional institutions, capacity, and cooperation</b>	Output 1d.1 Preparation of Russian language information materials	<b>13,889</b>		
	Output 1d.2 Promotion of Information exchange mechanisms			
	Output 1.d.3: Facilitation of regional dialogue			
	Project management for Regional component	<b>45,000</b>		
	<b>Total for Regional Component</b>	<b>170,001</b>	<b>380,000</b>	<b>550,001</b>
<b>Component 2(b): National HPMP, National Level Capacity Strengthening and HCFC Phase-out Investment -Tajikistan</b>				
<b>Outcome 2(b): Finalized and adopted HCFC phase-out strategy and action plan, implementation of national level training for the servicing sector and customs/enforcement authorities, and</b>	Output 2b.1: Formal HCFC Phase-out strategy and action plan developed and endorsed	<b>15,000</b>	<b>50,000</b>	<b>65,000</b>
	Output 2b.2: Trained working level Customs and enforcement officials, and refrigeration technicians using resources (trainers and training materials) from Component 1 with respect to legislation, regulations, customs controls, refrigeration	<b>586,750</b>	<b>1,000,000</b>	<b>1,586,750</b>



targeted phase-out investment demonstrations undertaken in priority areas	servicing techniques, and general best practices			
	Customs training and equipment support to enhance Customs control capability	235,750	500,000	735,750
	Refrigeration technicians training and equipment support to enhance refrigeration servicing practices	351,000	500,000	851,000
	Output 2b.3 - Targeted HCFC Phase-out Investment Program and Demonstration projects	<b>363,250</b>	<b>1,920,000</b>	<b>2,283,250</b>
	Upgrades of HCFC re-use system through strengthening R/R/R centers and improving storage of unwanted ODS capacity	161,250	870,000	1,031,250
	Pilot retrofit/replacement incentive program	87,000	200,000	287,000
	Demonstration of Benefits of Natural Cooling Technologies in A/C Sector	115,000	850,000	965,000
	<b>Sub-total</b>	<b>965,000</b>	<b>2,970,000</b>	<b>3,935,000</b>
<b>Component 3(b): Monitoring, learning, adaptive feedback, outreach and evaluation - Tajikistan</b>				
	Output 3.1: M&E and adaptive management applied to project in response to needs and extract lessons learned	35,000	0	35,000
	Output 3.2: Lessons learned and best practices are replicated at the national level			
	<b>Sub-total</b>	<b>35,000</b>	<b>0</b>	<b>35,000</b>
	Project Management for National Component	100,000	250,000	350,000
	<b>Total for National Component (with national PMC)</b>	<b>1,100,000</b>	<b>3,220,000</b>	<b>4,320,000</b>
	<b>Total Project Costs</b>	<b>1,270,001</b>	<b>3,600,000</b>	<b>4,870,001</b>

## 4 Project Indicators, Risks and Assumptions

The project Indicators, Risks and Assumptions are fully represented in the Strategic Results Framework (Annex A) as well as the Risk Identification and Mitigation tables in corresponding GEF CEO Endorsement Document (Section G). It is strongly advised to refer to these indicated annexes and sections of the CEO endorsement document

### Incremental Reasoning and Incremental Cost Analysis

The past technical assistance received by the country from the GEF was associated with CFC phase-out programmes, which were completed in 2005. It helped with technological conversion of a domestic refrigerator manufacturing plant (Pamir) and supply of servicing and R/R tools and equipment to stimulate CFC re-use in the country as well as institutional support and capacity building for Customs and refrigeration technicians.

International assistance on ODS phase out began in 1999 with the inclusion in the GEF pipeline of a Medium Size Project (MSP) entitled “Programme for Phasing Out Ozone Depleting Substances”<sup>11</sup> with UNDP and UNEP acting as joint implementing agencies. The project included a project preparation grant utilized between 2000 and 2002 to do detailed project document preparation, develop the Country Program<sup>12</sup> and support formation of a formal National Ozone Unit (NOU) in the Committee for Environmental Protection under the Government of Tajikistan. The project implementation phase undertaken between 2002 and 2005 consisted of two investment sub-projects and various technical assistance/capacity-strengthening sub-components. The investment sub-project addressed phase out of CFC-12 refrigerants in a domestic refrigeration manufacturer (with additional bilateral assistance), and establishing basic CFC recovery and recycling capability in the refrigeration service sector. Technical assistance covered capacity building in the form of NOU support, awareness programs, training and equipment for customs authorities, refrigeration technician training, and refrigerant management plan monitoring. In total US\$782,859 in GEF assistance was provided. Additional international support from the GEF has since been received through a UNEP administered regional capacity strengthening project for the period 2008 through 2010 entitled “Continuing Institutional Strengthening Support for CEITs to meet Obligations under the Montreal Protocol”<sup>13</sup> under which Tajikistan is allocated US\$170,000 in support funds.

The capacity built at that time was instrumental in addressing CFC phase-out challenge and strengthening the institutional capacity of the country to coordinate the implementation of the Montreal Protocol. It though was not designed to prepare to address HCFC phase-out and there is a serious technical and institutional capacity gap. The initial effort related to latter group of ODS substances took form of a regional MSP project to enable the collection of HCFC consumption data and prepare outline of HCFC phase-out strategies to amend the existing, outdated Country Programme on the Implementation of the Montreal Protocol. The project started in the end of 2008 and was finalized for Tajikistan in the end of 2010. Specific assistance to prepare for HCFC phase out was

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<sup>11</sup> <http://www.gefonline.org/projectDetailsSQL.cfm?projID=15>

<sup>12</sup> “National Programme: About Measures on Implementation of the Vienna Convention on Ozone Layer Protection and the Montreal Protocol on Ozone Depleting Substance” Committee for Environmental Protection, Adopted by Government Statement N477, March 12. 2002

<sup>13</sup> <http://www.gefonline.org/projectDetailsSQL.cfm?projID=3185>

provided under the regional GEF MSP and by a follow-on preparations for a regional GEF Full Scale Project (FSP) entitled “Initial HCFC Phase Out Implementation in the CEIT Region”<sup>14</sup> that was included in the GEF-4 pipeline.

The formulated outline of the HCFC strategy can be considered as a full-fledged strategy given the initial objectives of the MSP for Tajikistan were exceeded. The strategy sets clear directions for the country on how to effectively address the growth in HCFC consumption and relies on the technical assistance provided through the GEF, as no capacity building action has been taken to upgrade the existing CFC management potential of the country which has become redundant in the absence of CFC related challenges in the servicing sector. As such all GEF funding and associated co-financing is considered incremental. In the current project formulated in line with the HCFC phase-out strategy forming the Government’s action plan to eliminate dependence on HCFCs, GEF funds are to be directed to achieving project outcomes which meet the project environmental objective – avoided HCFC consumption and compliance reporting to the Montreal Protocol authorities - and which result in important global environmental benefits. In terms of the project’s design, the outcomes and the resultant global environmental benefits match with the GEF goals, objectives and strategic programs for the ODS Focal Area during GEF-4 as described previously.

In the absence of GEF assistance, it will not have been possible to leverage substantial co-finance resources in support of achieving HCFC phase-out by 2015 MP reduction milestone and further preparing the country for HCFC phase-out beyond 2015-2020 period – the main global environmental benefit of this project.

It is acknowledged that there are national benefits from the project overall and from the GEF’s contribution, which both relate to enhanced institutional and technical capacity to be in position to address the country’s dependence on HCFC imports as well the pursuit of linkage to climate change mitigation benefits at the national level (through better energy efficient approaches) by primarily addressing HCFC (ODS) dependence challenge with an element of information dissemination in the regional/sub-regional contexts. These benefits also apply equally in a regional and global context.

Technical and regulatory strengthening financed by the GEF brings additional benefits related to the capacity and knowledge to improve the general environmental protection system as it functions as of now in the country. It will involve inter-departmental cooperation on solving complex environmental challenges such as sound chemical management.

The level of global environmental benefit in terms of reduction in and further elimination of import and consumption of HCFC would not occur in the absence of the GEF’s intervention as the HCFC phase-out Strategy will not be initiated for implementation and no technical assistance will be provided geared towards this strategy. Therefore, this programme is considered as incremental.

The Incremental Cost Matrix prepared in CEO endorsement document provides an overall summary of the incremental costs, both the GEF and co-financing estimated for the project, linked specifically to the project outcomes from Annex A of CEO Endorsement, the baseline, and global environmental benefits.

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<sup>14</sup> <http://www.gefonline.org/projectDetailsSQL.cfm?projID=4102>

## Country Ownership: Country Eligibility and Country Drivennes

Tajikistan is a signatory and/or Party to a wide range of international agreements and conventions related to the environment. The principal ones with some relation to ozone protection issues are listed below.

Convention/Agreement	Signature	Ratification/ Accession (a)
Vienna Convention	n/a	06/05/1996(a)
Montreal Protocol	n/a	07/01/1998(a)
– London Amendment to the Montreal Protocol	n/a	07/01/1998(a)
– Copenhagen Amendment to the Montreal Protocol	n/a	07/05/2009(a)
– Montreal Amendment to the Montreal Protocol	n/a	07/05/2009(a)
– Beijing Amendment to the Montreal Protocol	n/a	07/05/2009(a)

Tajikistan's overall policy respecting the phase out of ODS is reflected in the decisions at the level of the President and Parliament (Majlisi Oli) applicable to its original accession to the Vienna Convention Montreal Protocol in 1996 and 1998 respectively along with subsequent ratification of all current amendments, hence a policy commitment to meet applicable control measures. This overarching commitment along with detailed aspects that give it substance has been formalized in the form of national legislation and supporting government statements or resolutions addressing specific issues such as application of an operating licensing system applicable to ODS imports with provisions to apply bans and quotas as required. Details of such legislation are provided in the outline of the HCFC phase-out Strategy.

Tajikistan completed phase out of Annex A and B substances in 2004 and has maintained compliance with the London Amendment control measures since that time. Similarly, it has complied with control measures in latter amendments regarding complete phase out of Methyl Bromide even though these were not acceded to until 2009. The only consumption of ODS in the country is HCFCs, entirely in the form of HCFC-22 utilized for refrigeration servicing.

In table below with additional information on ratification of other chemical related MEAs, it is noted that the country is not a party to the Basel Convention on the Trans-boundary Movement of Hazardous Waste, the UNECE Convention on Long-Range Trans-boundary Air Pollution, and the UNECE ESPOO Convention on Environmental Impact Assessment in a Trans-boundary Context.

Convention/Agreement	Signature	Ratification/ Accession (a)
Stockholm Convention on Persistent Organic Pollutants	25/05/2002	08/02/2007 (a)
Basel Convention on the Trans-boundary Movement of Hazardous Waste and their Disposal	Not a Party	Not a Party
Rotterdam Convention on Prior Informed Consent for Certain Chemicals and Pesticides in International Trade	09/29.1998	–
UNECE Convention on Long-Range Trans-boundary Air Pollution	Not a Party	Not a Party
– Gothenburg Protocol to Abate Acidification, Eutrophication, and Ground-Level Ozone	n/a	n/a
– Aarhus Protocol on Persistent Organic Pollutants	n/a	n/a
– Aarhus Protocol on Heavy Metals	n/a	n/a
Convention on Access to Information, Public Participation in Decision Making, and Access to Justice in Environmental Matters	n/a	08/17/2001
– Protocol on Pollutant Release and Transfer Registers	05/21/2003	-

ESPOO Convention on Environmental Impact Assessment in a Trans-boundary Context	Not a Party	
– Protocol on Strategic Environmental Assessment	n/a	n/a
UN Framework Convention on Climate Change	01/07/1998	12/29/2008
– Kyoto Protocol	04/07/1998	03/29/2009
UN Convention to Combat Diversification	n/a	07/16/1997(a)
Convention on Biological Diversity	10/29/1997	02/12/2004 (a)
– Cartagena Protocol on Bio-safety	n/a	02/12/2004 (a)

The project is specifically aligned with the outline of HCFC phase-out strategy that was prepared for Tajikistan.

### **Type of Financing Support Provided**

The project is designed to provide continuity with the initial GEF regional HCFC survey project.

The financing support provided will be in the form of a grant that will cover costs where foreign expenditures are required, recognizing the limited government and enterprise resources available to address HCFC phase-out. However, the GEF grant will leverage cash co-financing for the project that would otherwise not be channeled towards this global issue. This type of Grant funding is consistent with the GEF Focal Area Strategy as described above.

### **Sustainability**

The principal sustainability requirement for the project is the upgraded capacity of the country that will be used to effectively control the import and use/re-use of HCFCs to stay in compliance with the Montreal Protocol’s obligations on phasing-out HCFC imports.

In terms of its design, the project aligns the technical assistance in specific sub-components to the national institutions and private sector that have accumulated CFC phase-out expertise and strengthen the overall system to address HCFC challenge. By doing so, the project will ensure that a required level of ownership is achieved to ensure sustainable results.

The project will also re-establish connections to the current regional, Montreal Protocol related information exchange platforms which involve a number of Art 5 countries from Europe/CIS, to help with adopting more effective HCFC control measures based on other country experiences.

Within the above framework, the detailed project design, at the component and sub-component level, has a number of features that are intended to promote sustainability as noted below:

- The project places emphasis on the regional information exchange and assistance in support of effective HCFC import and consumption regulatory controls, training of trainers to further disseminate knowledge and strengthen skills of Customs, environmental inspectors, refrigeration technicians, as well to provide support to the establishment of Refrigeration Association. Required Russian/local language materials will be formulated to help improve practical working level skills in ODS management and control. High degree of interconnection to the so far accumulated materials under MLF assistance in the region will be ensured to bring in best practices. The materials that will

be developed will also be of use to Art 5 countries in the region, where HPMP implementation started in 2011.

- The emphasis is also placed for hands-on training of relevant project partners at the national level in support of the implementation of the national component. All training (regional and national) conducted under the project will utilize written and replicable training materials and a “train the trainer” approach. The new and updated training modules will be introduced into the study curriculum of national training institutions in the country such as the Customs Training Institute.
- Changes in HCFC handling practices will require strengthening basic capacities of individual technicians and technical centers in terms of availability of equipment servicing tools, something the project will provide the basis for through procurement and supply of such instruments. Upon the closure of the project, the tools/machinery will be transferred to reliable users to make sure the capacity is sustained beyond the projects duration.
- The project will contribute to strengthen and sustain the capacity for HCFC phase-out in the longer term through its support to the implementation of the HCFC phase-out strategy and which will provide the Government with a “road map” in addressing future HCFC related challenges.

An appropriate level of international expertise and technology transfer will be facilitated with GEF support to provide the country with sustaining capacity in HCFC management.

The programme will assist in improving the capability of the country to re-use HCFCs in order to address its HCFC consumption in a more organized manner.

Demonstration of energy efficient equipment working on alternatives and promotion of natural cooling technologies will be essential in order to assist the country, and other countries in the region, to make the appropriate and most efficient choices to ensure that low/non ODP and low/no GWP technologies are demonstrated in practice

## **Replicability**

As mentioned above, the country is approaching the final HCFC phase-out dates, with 75% reduction in the HCFC consumption as compared to the baseline in 2010 and further 90% reduction to be achieved by 2015. Through the implementation of this technical assistance project, the experience accumulated will be available to other countries in the region which operate both under non-Art 5 status as well as Art 5. The regional information exchange component will ensure all replicable results of the project are shared with interested countries on the regional basis.

## 5 Project Results Framework

<p><b>This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD:</b> Improved environmental protection, sustainable natural resources management, and increased access to alternative renewable energy.</p>
<p><b>Country Programme Outcome Indicators:</b> Compliance with international environmental conventions.</p>
<p><b>Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one):</b> Pillar 3: Clean Water, Sustainable Environment and Energy (from UNDAF 2010-2015).</p>
<p><b>Applicable GEF Strategic Objective and Program:</b> <b>Objectives:</b> To protect human health and the environment by assisting countries to phase out consumption and production and prevent releases of ODS according to their commitments to Montreal Protocol phase-out schedules, while enabling low-GHG (Greenhouse Gas) alternative technologies and practices.</p> <p><b>Program:</b> For the period of GEF-4, the GEF will assist eligible countries in meeting their HCFC phase-out obligations under the Montreal Protocol, and strengthening capacities and institutions in those countries that still are faced with difficulties in meeting their reporting obligations.</p>
<p><b>Applicable GEF Expected Outcomes:</b></p> <ul style="list-style-type: none"> <li>(1) HCFCs are phased-out according to Montreal Protocol schedule, or faster, in GEF-eligible countries</li> <li>(2) GEF-eligible countries meet their reporting obligations under the Montreal Protocol</li> </ul>
<p><b>Applicable GEF Outcome Indicators:</b></p> <ul style="list-style-type: none"> <li>(1) Indicators for Outcome 1: <ul style="list-style-type: none"> <li>(a) ODP adjusted tons of HCFCs phased-out from consumption (GEF-4 replenishment target: HCFCs: 50-70 ODP tons)</li> <li>(b) Percentage reduction in HCFC consumption in the participating countries</li> </ul> </li> <li>(2) Indicators for Outcome 2: <ul style="list-style-type: none"> <li>(a) Percentage of GEF-funded countries that meet their reporting obligations under the Montreal Protocol</li> </ul> </li> </ul>

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
<p><u>Objective:</u> To achieve compliance in Tajikistan with the accelerated Montreal Protocol HCFC phase-out requirements through stabilization and progressive reduction of HCFC consumption.</p>	<ul style="list-style-type: none"> <li>• Tajikistan is in compliance with the MP obligations for 2015 and is prepared to meet 2020 targets</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of approved HCFC phase-out strategy;</li> <li>• Unconstrained import of HCFC based equipment that creates long-term demand for HCFCs;</li> <li>• Gaps in HCFC control and institutional capacity</li> <li>• Weak HCFC re-use capacity and low-level of technical knowledge and instrumentation to address HCFC in the servicing sector</li> <li>• Continued illegal trade in ODS and mislabeling of containers</li> <li>• Limited availability of technical tools to test gas composition and quality as well as to limit emissions of HCFCs during equipment maintenance</li> <li>• Limited technical knowledge relating to good refrigeration practices as regards alternative refrigerants (non-ODS/low GWP such as ammonia, carbon dioxide, etc)</li> <li>• No current information products and programs</li> <li>• Limited exposure to alternative technologies and understanding of energy-saving aspects of new modern equipment operational on new technologies</li> </ul>	<ul style="list-style-type: none"> <li>• HCFC phase-out strategy fully formulated and recommended for adoption and implementation;</li> <li>• Effective regulatory instruments to limit import of HCFC containing equipment and reduce HCFC imports</li> <li>• Printed materials on various aspects related to HCFC phase-out (policy control options, enforcement and illegal trade, alternative technologies and energy-efficiency, best refrigeration practices etc) available</li> <li>• Current capacities of project stakeholders strengthened through capacity building and investment support to the public and private sectors</li> </ul>	<ul style="list-style-type: none"> <li>• Status of HCFC phase-out strategy as a formal government strategic document;</li> <li>• Art 7 reporting to Ozone Secretariat on HCFC import and monitoring of HCFC import reduction;</li> <li>• National legal and regulatory registers</li> <li>• Project Progress and M/E reports</li> </ul>	<ul style="list-style-type: none"> <li>• Overall government commitment and assumption of appropriate responsibility.</li> <li>• Regulatory enforcement resources and capacity available.</li> <li>• Project stakeholders actively participate in the project implementation and realization of HCFC phase-out strategy;</li> <li>• Accurate monitoring and reporting.</li> </ul>
<p><b>Outcome 1: Regional accelerated phase-out capacity building (containing four sub-components)</b></p>					



Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
Outcome 1 (a): Legislative and Policy Options for HCFC phase-out and control	<ul style="list-style-type: none"> <li>• Russian language resource materials on HCFC control options prepared</li> <li>• Awareness training for decision-makers on legislative and regulatory actions accomplished</li> <li>• Regional networking on the country with Art 5 and other non Art 5 countries in the region is supported</li> </ul>	<ul style="list-style-type: none"> <li>• Key stakeholders generally have limited awareness of the issue or actions required on the higher or technical level to address HCFC phase-out;</li> <li>• Decision-makers from enforcement department (Committee for Environmental Protection under the Government of Tajikistan, Customs) have limited knowledge and lack practical skills on the regulatory approaches to effectively control HCFC related challenges;</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of key guidance documentation in Russian, or local languages, where required, on HCFC control options, Customs enforcement approaches and methodologies, refrigeration sector capacity building, energy-efficiency, ODS destruction etc;</li> <li>• High-level decision-makers of the Committee for Environmental Protection under the Government of Tajikistan, Customs, territorial inspectorates, other Governmental agencies such as Ministry of Education, Agency for Standardization, Metrology, Certification and Trade Inspection under the Government of the Republic of Tajikistan (TajikStandard) are well informed about the objectives of HCFC consumption phase-out and measures to address this process;</li> <li>• Training of a selected number of trainers on the technical level (Customs controls and refrigeration practices) is complete on regional level to initiate trainings on national level</li> <li>• Regional networking with non Art 5 and other Art 5 countries re-established, contacts re-engaged, and overall supports accelerated capacity building of the country as well as essential experience exchange on important HCFC phase-out related topics</li> </ul>	<ul style="list-style-type: none"> <li>• National legal and regulatory registers</li> <li>• Equivalence comparison to international standards</li> <li>• Number of regional/sub-regional meetings attended by each country, and specific department (organized by MLF/UNEP-CAP team or by the current project)</li> <li>• Number of materials, in Russian, or local languages, prepared and used by the countries</li> <li>• Number of decision makers and trainers trained in each country</li> <li>• Monitoring of press and media coverage</li> <li>• Project Progress and M/E reports</li> </ul>	<ul style="list-style-type: none"> <li>• In-country interagency coordination is sustainable through high-level Government support and allows for timely participation of various department sin regional meetings</li> <li>• MLF/UNEP-CAP regional and sub-regional conferences and meetings are organized on HCFC phase-out subjects etc</li> <li>• Trainers are further deployed for the training at national level</li> <li>• Any additional training will be organized at national level (with or w/o participation of international trainer)</li> </ul>
Outcome 1 (b): Capacity Building for Enforcement of HCFC control measures by customs and environmental/technical inspection authorities	<ul style="list-style-type: none"> <li>• Russian language resource documentation</li> <li>• Awareness raising activities</li> <li>• Training of Trainers</li> <li>• PIC Network</li> <li>• Regional networking</li> </ul>	<ul style="list-style-type: none"> <li>• Limited number or lack of trained trainers on enforcement and best refrigeration aspects;</li> <li>• Required materials in Russian or local languages, on HCFC control options, Customs enforcement approaches and methodologies, refrigeration sector capacity building, energy-efficiency, alternative technologies and their application, illegal trade and PIC, technician certification and ODS waste management related issues are limited in availability or absent;</li> <li>• Regional networking with other partner countries in the region is lacking which prevents information and experience exchange [see topics above];</li> <li>• Cooperation between non-Art 5 countries on effective action standards is minimal or absent</li> </ul>			
Outcome 1 (c): Capacity Building for the Refrigeration Sector, Incorporation of Energy-Efficiency and GHG reduction elements	<ul style="list-style-type: none"> <li>• Preparation of Russian language training manuals and information materials</li> <li>• ToT on Best Refrigeration Practices</li> </ul>				
Outcome 1 (d): Support for the development of regional institutions, capacity, and cooperation	<ul style="list-style-type: none"> <li>• Preparation of Russian language information materials</li> <li>• Promotion of Information exchange mechanisms</li> <li>• Facilitation of regional dialogue</li> </ul>				
<b>Outcome 2: National level phase-out capacity building</b>					

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
Outcome 2 (b – Tajikistan): HPMP, National Level Capacity Strengthening and HCFC Phase Out Investment	<ul style="list-style-type: none"> <li>Formal HCFC Phase-out strategy and action plan developed and endorsed</li> </ul>	<ul style="list-style-type: none"> <li>No formal HCFC strategy is adopted and enforced through regulatory measures</li> <li>Inter-agency coordination to address HCFC phase-out is limited</li> <li>No updated HCFC and HCFC equipment import quota and use system is in place</li> <li>Low level of awareness related to HCFC phase-out across stakeholders and general public</li> <li>No current information products and programs</li> </ul>	<ul style="list-style-type: none"> <li>HCFC phase-out strategy fully formulated, packaged as draft legislation for Government approval and cleared by line Ministries/departments for final endorsement</li> <li>Widely accessible information on HCFC phase-out strategy and its elements</li> <li>Inter-agency coordination related to HCFC phase-out is improved</li> <li>Effective regulatory measures (quotas etc) are updated and enforced</li> <li>Main stakeholders are informed about HCFC phase-out strategy and regulatory measures related to HCFC import and use control</li> </ul>	<ul style="list-style-type: none"> <li>National legal and regulatory registers</li> <li>Equivalence comparison to international standards</li> <li>Confirmation correspondence from Government to UNDP</li> <li>Monitoring of press and media coverage</li> <li>Project Progress and M/E reports</li> </ul>	<ul style="list-style-type: none"> <li>Government commitment to timely processing of required HCFC action plan and regulations</li> <li>Art 7 compliance reporting to Ozone Secretariat</li> <li>Interagency coordination is sustainable through high-level Government support</li> <li>Stakeholders support updated regulations</li> </ul>
	<ul style="list-style-type: none"> <li>Trained and equipped working level Customs and enforcement officials, and refrigeration technicians using resources (trainers and training materials) from Component 1 with respect to legislation, regulations, customs controls, refrigeration servicing techniques, and general best practices</li> </ul>	<ul style="list-style-type: none"> <li>Key Government stakeholders have limited awareness of HCFC phase-out issue, challenges to address it and skills/tools to enforce HCFC control measures in practice</li> <li>Limited active educational efforts or tools are available</li> <li>Illegal trade in ODS continues unregistered and unnoticed</li> <li>No current information products and programs</li> <li>Lack of portable HCFC analytical equipment and modern skills to control illegal imports</li> <li>General absence of basic servicing tools to strengthen HCFC re-use system</li> </ul>	<ul style="list-style-type: none"> <li>Inclusion of HCFC control issues into curricula of Customs and enforcement officials' training institutions</li> <li>Update of study plans for refrigeration technicians at specialized training centers and State Technical University</li> <li>Well informed stakeholder community engaged in addressing HCFC phase-out issue with required level of understanding and technical capacity</li> <li>Re-tooling (basic portable analytical and instrumentation for servicing sector) of main stakeholder groups implemented</li> <li>Illegal trade is registered and stopped at entry points</li> </ul>	<ul style="list-style-type: none"> <li>Prepared and registered educational curricula</li> <li>Attendance at training information events</li> <li>Customs reporting information</li> <li>Procurement documents on supply of equipment</li> <li>Project Progress and M/E reports</li> </ul>	<ul style="list-style-type: none"> <li>Interagency coordination (Ministry of Education is supportive of changes to curricula) is sustainable through high-level Government support</li> <li>Sustaining interest and capacity in educational institutions to maintain educational programs</li> <li>Active participation and partnership with education institutions and attendance of training events</li> </ul>
	<ul style="list-style-type: none"> <li>Targeted HCFC Phase-out Investment Program and Demonstration projects</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
	<ul style="list-style-type: none"> <li>• Upgrades of HCFC re-use system through strengthening R/R/R centers and improving storage of unwanted ODS capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Alternative technologies are not commonly used for retrofit of existing systems and are not field tested to facilitate practical introduction</li> <li>• Refrigerated equipment in poor condition continues to be serviced with the use of HCFCs and maintained by the companies in these sectors</li> <li>• No or minimal investment is taking place to retrofit or replace HCFC equipment with alternative refrigerant systems</li> <li>• No or minimal information is available on opportunities to reduce dependence to HCFC</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrated benefits of up to date modern cooling equipment</li> <li>• Awareness of the wider community of HCFC users raised regarding such solutions</li> <li>• Reduced knowledge barriers towards equipment retrofits/conversions</li> <li>• Accelerated retirement of HCFC-based equipment and HCFC use in this sector decreased</li> <li>• Technical staff is knowledgeable on correct use of new technologies and equipped with basic servicing instrumentation to ensure equipment servicing as per standard international practices</li> </ul>	<ul style="list-style-type: none"> <li>• End user grants attributed for conversions to non-ODS technologies</li> <li>• Attendance of companies at inception workshop</li> <li>• Procurement documents on supply of equipment</li> <li>• Mission and site visits reports of international and national consultants</li> <li>• Company's written commitments to stop usage of HCFCs</li> <li>• Final results dissemination workshop report</li> <li>• Project Progress and M/E reports</li> </ul>	<ul style="list-style-type: none"> <li>• Enterprises willing/able to pay for part of the conversion/retrofits</li> <li>• Availability of non-ODS equipment on the market</li> <li>• Local engineering companies interested/capable of delivering required expertise</li> <li>• Supplied equipment is adequately maintained and used by company</li> </ul>
	<ul style="list-style-type: none"> <li>• Pilot retrofit/replacement incentive program</li> </ul>	<ul style="list-style-type: none"> <li>• Limited proliferation of low GWP alternatives (NH3, CO2 double stage, HCs etc) to HCFCs in refrigerated equipment;</li> <li>• Safety standards for new low GWP alternatives do not exist</li> <li>• Generally low awareness on new alternative technologies in the servicing sector and benefits in energy savings (co-benefits for economic operations as well as for climate change)</li> <li>• No current information on products and programs demonstrating natural cooling technologies</li> <li>• Lack of experience with, knowledge of and skills to assemble, install, operate and maintain HCFC-free commercial/industrial equipment using non-ODS/low-zero GWP technologies (NH3, CO2 double stage, HCs etc)</li> <li>• Low readiness for/acceptance of new technologies by end-users</li> </ul>	<ul style="list-style-type: none"> <li>• Natural cooling low-zero ODS/low-zero GWP technologies in the servicing sector demonstrated and promoted</li> <li>• Stakeholder community (private/public HCFC equipment user sector) well informed about new alternative technologies and their benefits</li> <li>• Local engineering companies gain knowledge and skills to assemble and operate such technologies in future</li> <li>• Safety standards for new alternatives reviewed and adopted</li> <li>• Performance/operational parameter comparison of old Vs. new equipment monitored and available</li> <li>• Market is more prepared for the acceptance of new alternatives</li> </ul>	<ul style="list-style-type: none"> <li>• National legal and regulatory registers on safety standards</li> <li>• Equivalence comparison to international standards</li> <li>• Procurement documents on supply of equipment</li> <li>• Mission and site visits reports of international and national consultants</li> <li>• Monitoring of press and media coverage</li> <li>• Project Progress and M/E reports</li> </ul>	<ul style="list-style-type: none"> <li>• High-level Government support in favour of regulatory ban for imports of HCFC containing equipment</li> <li>• Costs of new equipment does not exceed project budget</li> <li>• Project participants maintain their interest in the use of new equipment and co-finance local design for replication, installation and maintenance works</li> </ul>

Project Strategy	Objectively verifiable indicators	Baseline	Target	Sources of verification	Assumptions
	<ul style="list-style-type: none"> <li>• Demonstration of Benefits of Natural Cooling Technologies in A/C Sector</li> </ul>	<ul style="list-style-type: none"> <li>• No active network to facilitate reuse of HCFC – lack of a comprehensive HCFC re-use system, these are not re-used domestically and country depends on imports</li> <li>• No proactive Refrigeration Technicians Association - Association does not have mandate to demonstrate mechanism to recover and distribute purified HCFC</li> <li>• HCFC re-cycling and reclaim equipment, or network, is generally outdated and not suited for HCFCs in the former case and is absent in the latter</li> <li>• Analytical equipment for servicing sector does not exist to ensure quality of re-cycled/reclaimed HCFC refrigerants and improve confidence of buyers (servicing centers/technicians or end-users)</li> <li>• Limited active educational efforts or tools on best refrigeration servicing practices are available</li> </ul>	<ul style="list-style-type: none"> <li>• HCFC re-use system upgraded through strengthening of Refrigeration Association and R/R/R centers across the country in strategic locations – country’s technical capacity is improved</li> <li>• HCFC re-use system is implemented in practice allowing to reduce dependence on import of HCFCs</li> <li>• Technical service center staff is trained on adequate use of equipment and best refrigeration practices in equipment maintenance and retrofits</li> <li>• Well informed stakeholder community engaged in addressing HCFC phase-out issue with required level of understanding and technical capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance of company staff at training and information events</li> <li>• Procurement documents on supply of equipment</li> <li>• Reports from Refrigeration Association</li> <li>• Mission and site visits reports of international and national consultants on refrigerant recovery/recycling and reclamation rates</li> <li>• Project Progress and M/E reports</li> </ul>	<ul style="list-style-type: none"> <li>• Government informs the stakeholder community on HCFC restrictions, HCFC phase-out strategy and further limits HCFC and HCFC equipment imports</li> <li>• Reinforced control (quantities/quality) instruments for HCFCs introduced</li> <li>• Government requires regular reporting and perform monitoring of works</li> <li>• Supplied equipment is adequately maintained and used by Association and centers</li> </ul>
<b>Outcome 3: Monitoring, learning, adaptive feedback, outreach and evaluation</b>	<ul style="list-style-type: none"> <li>• M&amp;E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.</li> </ul>	<ul style="list-style-type: none"> <li>• No Monitoring and Evaluation system</li> <li>• No evaluation of project output and outcomes</li> </ul>	<ul style="list-style-type: none"> <li>• Monitoring and Evaluation system developed during year 1.</li> <li>• Mid-term-evaluation of project output and outcomes conducted with lessons learnt at 30 months of implementation.</li> <li>• Final evaluation report ready in the end of project</li> </ul>	<ul style="list-style-type: none"> <li>• Project document inception workshop report.</li> <li>• Independent mid-term evaluation report.</li> <li>• Final evaluation report</li> </ul>	<ul style="list-style-type: none"> <li>• Availability of reference material and progress reports</li> <li>• Cooperation of stakeholder agencies and other organizations.</li> </ul>

*Outcome 1 (a): Legislative and Policy Options for HCFC phase-out and control*  
Output 1.1: Russian language resource materials on HCFC control options prepared  
Output 1.2: Awareness training for decision-makers on legislative and regulatory actions accomplished  
Output 1.3: Regional networking on the country with Art 5 and other non Art 5 countries in the region is supported

*Outcome 1 (b): Capacity Building for Enforcement of HCFC control measures by customs and environmental/technical inspection authorities*  
Output 1.4: Russian language resource documentation  
Output 1.5: Awareness raising activities  
Output 1.6: Training of Trainers  
Output 1.7: PIC Network  
Output 1.8: Regional networking

*Outcome 1 (c): Capacity Building for the Refrigeration Sector, Incorporation of Energy-Efficiency and GHG reduction elements*

<p>Output 1.9: Preparation of Russian language training manuals and information materials</p> <p>Output 1.10: ToT on Best Refrigeration Practices</p>
<p><i>Outcome 1 (d): Support for the development of regional institutions, capacity, and cooperation</i></p> <p>Output 1.11: Preparation of Russian language information materials</p> <p>Output 1.12: Promotion of Information exchange mechanisms</p> <p>Output 1.13: Facilitation of regional dialogue</p>
<p><i>Outcome 2 (b – Tajikistan): HPMP, National Level Capacity Strengthening and HCFC Phase Out Investment</i></p> <p>Output 2.1: Formal HCFC Phase-out strategy and action plan developed and endorsed</p> <p>Output 2.2: Trained and equipped working level Customs and enforcement officials, and refrigeration technicians using resources (trainers and training materials) from Component 1 with respect to legislation, regulations, customs controls, refrigeration servicing techniques, and general best practices</p> <p>Output 2.3: Targeted HCFC Phase-out Investment Program and Demonstration projects</p>
<p><i>Outcome 3: Monitoring, learning, adaptive feedback, outreach and evaluation</i></p> <p>Output 3.1: M&amp;E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted.</p> <p>Output 3.2: Lessons learned and best practices are replicated at national level</p>

## 6 TOTAL BUDGET AND WORKPLAN

<b>Award ID:</b>	00066625	Project ID(s):	00082745
<b>Award Title:</b>	<u>Tajikistan: Initial Implementation of Accelerated HCFC Phase Out in the CEIT Regional</u>		
<b>Business Unit:</b>	TAJ10		
<b>Project Title:</b>	<u>Tajikistan: Initial Implementation of Accelerated HCFC Phase Out in the CEIT Regional</u>		
<b>PIMS no.</b>	4903		
<b>Implementing Partner (Executing Agency)</b>	UNDP Tajikistan		

GEF Outcome/Atlas Activity	Responsible Party/ Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Total (USD)	See Budget Note:
<b>OUTCOME 1: Regional accelerated phase-out capacity building (to be implemented by UNDP Regional Center in Slovakia)</b>										
<b>OUTCOME 2: HPMP, National Level Capacity Strengthening and HCFC Phase Out Investment</b>										
Output 2.1: Formal HCFC Phase-out strategy and action plan developed and endorsed	DIM	62000	GEF	72100	Contractual services (workshops, rent, equipment, etc)	\$9,000	\$0	\$0	\$9,000	x
				72100	Contractual services (publications etc)	\$6,000	\$0	\$0	\$6,000	x
					<b>Sub-total</b>	<b>\$15,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$15,000</b>	
Output 2.2.: Trained and equipped working level Customs and enforcement officials, and refrigeration technicians using resources (trainers and training materials) from Component 1	DIM	62000	GEF	72200	Equipment (Customs and technicians; tools and office training equipment)	\$150,000	\$150,000	\$94,750	\$394,750	x
				72100	Contractual services (Training of Customs and technicians)	\$80,000	\$75,000	\$0	\$155,000	x
				71200	International Consultants (to deliver trainings)	\$20,000	\$0	\$0	\$20,000	x
				71300	National consultant	\$5,000	\$5,000	\$0	\$10,000	x
				72100	Contractual services (publications etc)	\$4,000	\$3,000	\$0	\$7,000	x
					<b>Sub-total</b>	<b>\$259,000</b>	<b>\$233,000</b>	<b>\$94,750</b>	<b>\$586,750</b>	
Output 2.3: Targeted HCFC Phase-out Investment Program and Demonstration projects										

Upgrades of HCFC re-use system	DIM	62000	GEF	72200	Equipment	\$80,000	\$41,250	\$0	\$121,250	x
				71200	International Consultant (TA)	\$15,000	\$0	\$0	\$15,000	x
				71300	National consultant	\$5,000	\$5,000	\$5,000	\$15,000	x
				72100	Contractual services (workshops, rent, equipment, etc)	\$0	\$10,000	\$0	\$10,000	x
					<b>Sub-total</b>	<b>\$100,000</b>	<b>\$56,250</b>	<b>\$5,000</b>	<b>\$161,250</b>	
Pilot retrofit/replacement incentive program	DIM	62000	GEF	72100	Contractual services (workshops)	\$0	\$4,000	\$3,000	\$7,000	x
				72100	Contractual services (grants)	\$0	\$30,000	\$25,000	\$55,000	
				71200	International Consultant (TA)	\$0	\$10,000	\$10,000	\$20,000	
				71300	National consultant	\$0	\$5,000	\$0	\$5,000	x
					<b>Sub-total</b>	<b>\$0</b>	<b>\$49,000</b>	<b>\$38,000</b>	<b>\$87,000</b>	
Demonstration of Benefits of Natural Cooling Technologies in A/C Sector	DIM	62000	GEF	72200	Equipment	\$45,000	\$0	\$0	\$45,000	x
					International Consultant (TA)	\$10,000	\$10,000	\$0	\$20,000	
					National consultant	\$8,000	\$8,000	\$9,000	\$25,000	
				72100	Contractual services (workshops)	\$0	\$15,000	\$10,000	\$25,000	x
					<b>Sub-total</b>	<b>\$63,000</b>	<b>\$33,000</b>	<b>\$19,000</b>	<b>\$115,000</b>	
					<b>Total Outcome 2</b>	<b>\$437,000</b>	<b>\$371,250</b>	<b>\$156,750</b>	<b>\$965,000</b>	
<b>OUTCOME 3: Monitoring, learning, adaptive feedback, outreach and evaluation - Uzbekistan</b>										
OUTCOME 3: Monitoring, learning, adaptive feedback, outreach and evaluation - Uzbekistan	DIM	62000	GEF	71200	International Consultants	\$0	\$15,000	\$20,000	\$35,000	x
					<b>Total M &amp; E</b>	<b>\$0</b>	<b>\$15,000</b>	<b>\$20,000</b>	<b>\$35,000</b>	
Project Management Budget (PMB)	DIM	62000	GEF	71300	Local Consultants	\$27,000	\$27,000	\$25,000	\$79,000	x
				71600	Travel				\$0	x
				72200	Equipment	\$16,000	\$0	\$0	\$16,000	x
				74500	Miscellaneous (audit)	\$1,000	\$2,000	\$2,000	\$5,000	x
					<b>Total Management national</b>	<b>\$44,000</b>	<b>\$29,000</b>	<b>\$27,000</b>	<b>100,000</b>	
						<b>PROJECT TOTAL national w/o PMC</b>	<b>\$437,000</b>	<b>\$386,250</b>	<b>\$176,750</b>	<b>\$1,000,000</b>
						<b>PROJECT TOTAL national</b>	<b>\$481,000</b>	<b>\$415,250</b>	<b>\$203,750</b>	<b>\$1,100,000</b>





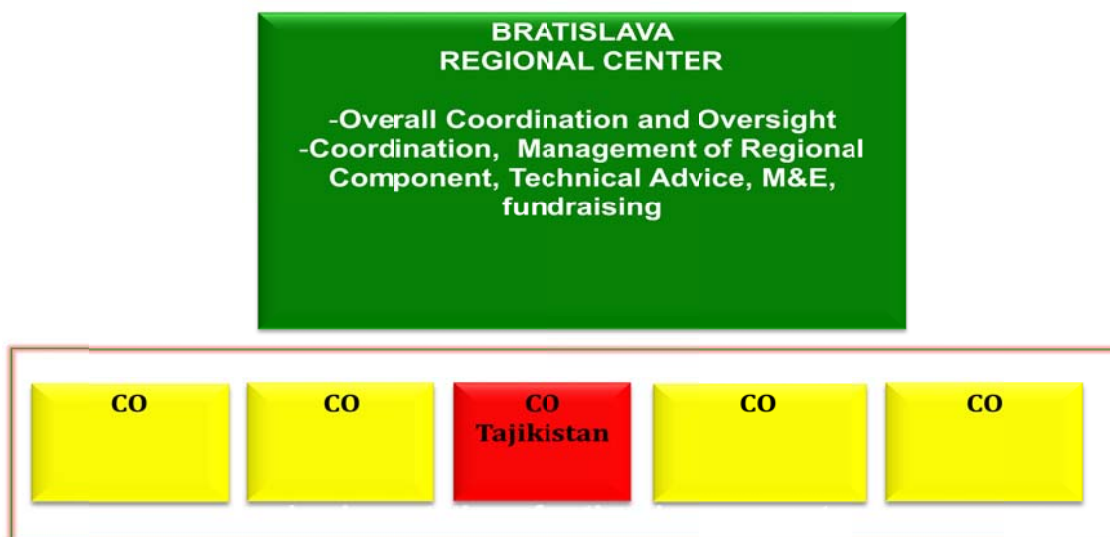


## 6 Management Arrangements see undp popp for further details

The project “Initial Implementation of Accelerated HCFC Phase Out in Tajikistan” is a part of regional project “Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region”. The project will be directly implemented by UNDP according to its rules and regulations.

In Tajikistan the project will be implemented by the UNDP Country Office in close partnership with the major project counterparts particularly Committee for Environmental Protection under the Government of the Republic of Tajikistan.

Implementation: Multi-country project arrangement



The Committee for Environmental Protection under the Government of Republic of Tajikistan will appoint a National Project Focal Point that will serve as a major contact person with the project on behalf of the Government. This responsibility includes representing and supporting project objectives at high decision making levels within the Government of Tajikistan, as well as ensuring that the required government support to reach the milestones of the Project is available.

A Project Manager (PM) will be hired to manage the activities on a day-to-day basis. The Project Manager will assume overall responsibility for the successful implementation of project activities and the achievement of planned project outputs. The PM will be responsible for overall project coordination and implementation, consolidation of work plans and project papers, preparation of quarterly progress reports, reporting to the project supervisory bodies, and supervising the work of the project experts and other project staff. The PM will also closely coordinate project activities with relevant Government and other institutions and hold regular consultations with project stakeholders. She/he will work closely with the national and international experts hired under the project, as well as the Project Assistant, and will report to the UNDP Country Office (UNDP CO).

The Administrative and Financial Assistant will provide assistance to the Project Manager in the implementation of day-to-day project activities. She/he is responsible for all administrative (contractual, organizational and logistical) and accounting (disbursements, record-keeping, cash management) matters related to the project.

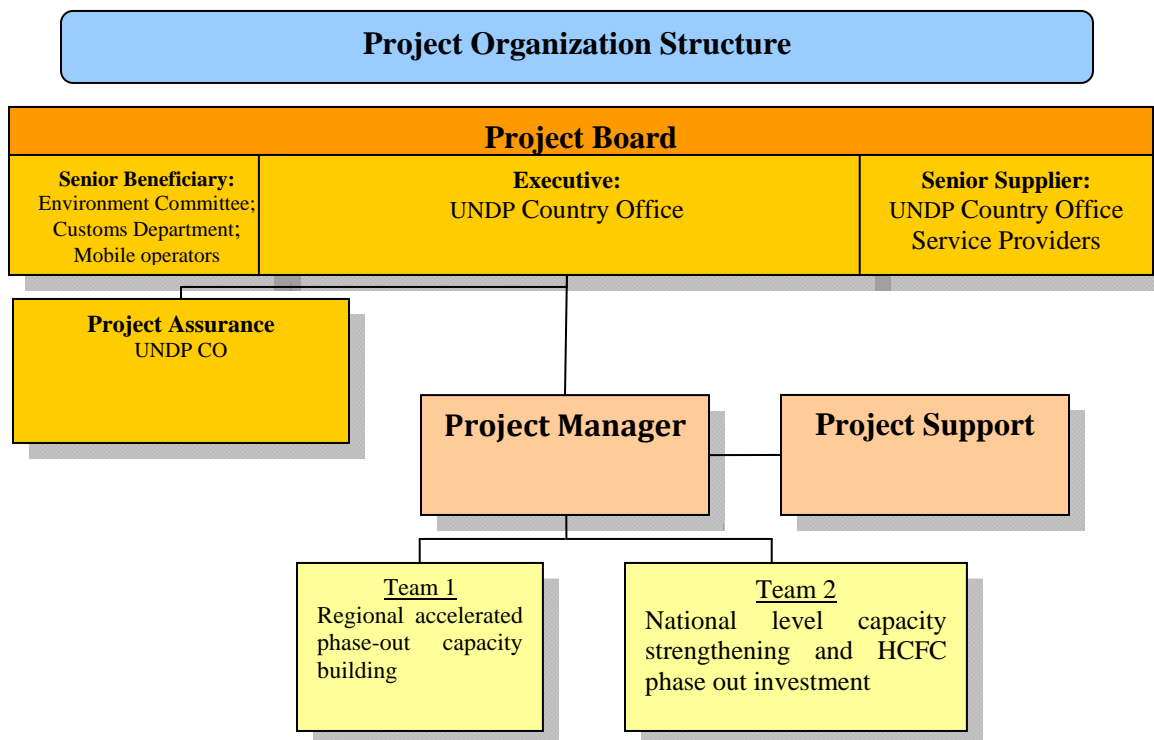
National and international consultancy services will be called in for specific tasks under the various project components. These services, either of individual consultants or under sub-contacts with consulting companies, will be procured in accordance with applicable UNDP guidelines.

**The Project Board (PB)** will be established to provide strategic directions and management guidance to project implementation. The PB will consist of representatives of all key stakeholders and will ensure the inclusion of industries' interests, the UNDP Country Office (CO), as well as representatives of the private sector. The PB will play a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It will ensure that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies.

In order to ensure UNDP's ultimate accountability for the project results, PB decisions will be made in accordance to standards that shall ensure management for development results, best value for money, fairness, integrity, transparency and effective international competition.

The project will be implemented in close coordination and collaboration with all relevant government institutions, regional authorities, industries and NGOs, as well as with other related relevant projects in the region. The UNDP-CO will also monitor the project implementation and achievement of the project outcomes and outputs, and will ensure the proper use of UNDP/GEF funds. Financial transactions, reporting and auditing will be carried out in compliance with established UNDP rules and procedures for direct implementation modality.

In order to accord proper acknowledgement to GEF for providing funding, a GEF logo will appear on all relevant GEF project publications, including, among others, project hardware purchased with GEF funds. Any citation on publications regarding this project will also accord proper acknowledgment to GEF.



The Board contains three distinct roles, including:

- 1) An Executive: individual representing the project ownership to chair the group.
- 2) Senior Supplier: individual or group representing the interests of the parties concerned, which provide funding for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project.
- 3) Senior Beneficiary: individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries.
- 4) The Project Assurance role supports the Project Board Executive by carrying out objective and independent project oversight and monitoring functions. The Project Manager and Project Assurance roles should never be held by the same individual for the same project.

## 6.1 Monitoring and Evaluation

The project will be monitored through the following M& E activities. The M& E budget is provided in the table below. Further explanatory details are provided in the umbrella document.

Recruitments of M&E experts will be managed regionally through COA codes provided by UNDP Country Office.

## M&E Work Plan and budget

Type of M&E activity	Responsible Parties	Budget US\$	Time frame
Inception Workshop and Report	<ul style="list-style-type: none"> <li>▪ Project Manager</li> <li>▪ UNDP CO, UNDP GEF</li> <li>▪ International Technical Support/Safeguards Expert</li> </ul>	Staff time	Within first two months of project start up
Measurement of Means of Verification of project results.	<ul style="list-style-type: none"> <li>▪ UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.</li> </ul>	None	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and implementation</i>	<ul style="list-style-type: none"> <li>▪ Oversight by Project Manager</li> <li>▪ Project team</li> </ul>	None	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ UNDP RTA</li> <li>▪ UNDP EEG</li> </ul>	None	Annually
Periodic status/ progress reports	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> </ul>	None	Quarterly
Mid-term Evaluation	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ UNDP RCU</li> <li>▪ External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 15,000	At the mid-point of project implementation.
Final Evaluation	<ul style="list-style-type: none"> <li>▪ Project manager and team,</li> <li>▪ UNDP CO</li> <li>▪ UNDP RCU</li> <li>▪ External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 20,000	At least three months before the end of project implementation
Project Terminal Report	<ul style="list-style-type: none"> <li>▪ Project manager and team</li> <li>▪ UNDP CO</li> <li>▪ local consultant</li> <li>▪ International Technical Support/Safeguards Expert</li> </ul>	Staff time	At least three months before the end of the project
Audit	<ul style="list-style-type: none"> <li>▪ UNDP CO</li> <li>▪ Project manager and team</li> </ul>	None (cost in PM Budget)	Yearly
Visits to field sites	<ul style="list-style-type: none"> <li>▪ UNDP CO</li> <li>▪ UNDP RCU (as appropriate)</li> <li>▪ Government representatives</li> </ul>	For GEF supported projects, paid from IA fees and operational budget	Yearly
<b>TOTAL indicative COST</b> Excluding project team staff time and UNDP staff and travel expenses		US\$ 35,000 <sup>15</sup>	

<sup>15</sup> Costs only for International Consultant supporting M&E as part of Technical support/safeguards monitoring. It is estimated that additional US\$15,000 from project management salaries will be devoted to M&E activities. Audit costs in the Project Management component are US\$5,000.

## 1. LEGAL CONTEXT

1. This project document shall be part of the instruments referred to as such in Article 1 of the Standard Basic Assistance Agreement (SBAA) between the Government of Tajikistan and UNDP, signed on the 1st day of October 1993.
2. Consistent with the Article III of the SBAA, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP's property in the executing agency's custody, rests with the implementing partner.
3. The executing agency shall:
  - (a) Put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
  - (b) Assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.
4. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.
5. The executing agency agrees to undertake all reasonable efforts to ensure that none of the funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

## 2. ANNEXES

## Annex 1

**Risk Analysis.** *Use the standard UNDP Atlas [Risk Log template](#). For UNDP GEF projects in particular, please outline the risk management measures including improving resilience to climate change that the project proposes to undertake.*

The Project Indicators, Risks and Assumptions are fully represented in the Strategic Results Framework (Annex A) as well as the Risk Identification and Mitigation tables in the corresponding GEF CEO Endorsement Document (Section G). It is strongly advised to refer to these indicated annexes and sections of the CEO endorsement document.



## **Annex 2**

**Agreements.** *Any additional agreements, such as cost sharing agreements, project cooperation agreements signed with NGOs<sup>16</sup> (where the NGO is designated as the “executing entity”, letters of financial commitments, GEF OFP letter, GEF PIFs and other templates for all project types) should be attached.*

GEF OFP Endorsement letter is attached to the submission package

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<sup>16</sup> For GEF projects, the agreement with any NGO pre-selected to be the main contractor should include the rationale for having pre-selected that NGO.

## Annex 3

### Terms of Reference<sup>17</sup>

#### Terms of Reference for Project Board and National Project Coordinator

##### PROJECT BOARD

Composition and organization: The Project Board contains three roles, including (1) **an executive**: individual representing the project ownership to chair the group; (2) **senior supplier**: individual or group representing the interests of the parties concerned which provide funding and/or technical expertise to the project; and (3) **senior beneficiary**: individual or group of individuals representing the interests of those who will ultimately benefit from the project.

The role of the Project Board is to provide strategic oversight and direction of the programme, in order to ensure that it retains strategic focus, and to ensure achievement of results on the primary project outcomes. It will:

- a) Approve annual work plans for the project, which are prepared by the Project Manager, ensuring that these are focused and consistent with deliverables set out in the project logical framework.
- b) Review progress reports, developed by corresponding Implementing Partners, against the work plans, and take strategic decisions on how to address any major challenges, brought to the Board's attention.
- c) Monitor progress and impact of any wider issues - e.g. public service reform (including decentralisation and local government law), macro-economic situation, doing business reforms, programmes by other partners - that might impact upon the project and ensure that these are reflected as necessary within the project.
- d) Represent as necessary the interests of the project in high level government discussions.
- e) Agree terms of reference for project reviews and independent evaluations.

##### I. Executive

The Executive is ultimately responsible for the project, supported by the Senior Beneficiary and Senior Supplier. The Executive's role is to ensure that the project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes. The Executive has to ensure that the project gives value for money, ensuring a cost-conscious approach to the project, balancing the demands of beneficiary and supplier. Specific Responsibilities (as part of the above responsibilities for the Project Board) include:

- Ensure that there is a coherent project organisation structure and logical set of plans
- Set tolerances in the AWP and other plans as required for the Project Manager
- Monitor and control the progress of the project at a strategic level
- Ensure that risks are being tracked and mitigated as effectively as possible
- Brief Outcome Board and relevant stakeholders about project progress
- Organise and chair Project Board meetings

##### II. Senior Beneficiary

The Senior Beneficiary is responsible for validating the needs and for monitoring that the solution will meet those needs within the constraints of the project. This role represents the interests of all those who will benefit from the project, or those for whom the deliverables resulting from activities will achieve specific output targets. The Senior Beneficiary role monitors progress against targets and quality criteria. Specific Responsibilities (as part of the above responsibilities for the Project Board) include:

- Ensure the expected output(s) and related activities of the project are well defined
- Make sure that progress towards the outputs required by the beneficiaries remains consistent from the beneficiary perspective
- Promote and maintain focus on the expected project output(s)
- Prioritise and contribute beneficiaries' opinions on Project Board decisions on whether to implement

<sup>17</sup> TORs for technical personnel will be formulated at implementation stage

recommendations on proposed changes

- Resolve priority conflicts

The assurance responsibilities of the Senior Beneficiary are to check that:

- Specification of the Beneficiary's needs is accurate, complete and unambiguous
- Implementation of activities at all stages is monitored to ensure that they will meet the beneficiary's needs and are progressing towards that target
- Impact of potential changes is evaluated from the beneficiary point of view
- Risks to the beneficiaries are frequently monitored

### III. Senior Supplier

The Senior Supplier represents the interests of the parties which provide funding and/or technical expertise to the project (designing, developing, facilitating, procuring, implementing). The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project. The Senior Supplier role must have the authority to commit or acquire supplier resources required. Specific Responsibilities (as part of the above responsibilities for the Project Board) include:

- Make sure that progress towards the outputs remains consistent from the supplier perspective
- Promote and maintain focus on the expected project output(s) from the point of view of supplier management
- Ensure that the supplier resources required for the project are made available
- Contribute supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes
- Arbitrate on, and ensure resolution of, any supplier priority or resource conflicts

The supplier assurance role responsibilities are to:

- Advise on the selection of strategy, design and methods to carry out project activities
- Ensure that any standards defined for the project are met and used to good effect
- Monitor potential changes and their impact on the quality of deliverables from a supplier perspective

Monitor any risks in the implementation aspects of the project

## Project Manager

### I. Position Information

Position Title:	Project Manager
SC range:	SC-9
Project Title:	
Duration of the service:	1 year (with possible extension subject to satisfactory performance)
Work status	Full-time
Reports To:	Head of Environment and Energy Unit

### II. Background

### III. Functions / Key Outputs Expected

- Responsible for day-to-day management, administration and decision-making for the project;
- Oversees strategic planning process for the project and ensures its implementation in accordance with the signed project document;
- Responsible for ensuring that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost;
- Manage the realization of project outputs through activities;
- Ensures that project contributes to the promotion of gender equality by reaching, involving and benefiting both women and men in its activities (gender mainstreaming);
- Provide direction and guidance to project team(s)/ responsible party (ies);
- Identifies partnership strategies with regard to providers of specialised expertise and possible co-financiers, and assists in resource mobilisation for project components;

- Identify and obtain any support and advice required for the management, planning and control of the project;
- Liaise with any suppliers;
- Perform other duties related to the scope of work of the PM as required

**Running a project**

- Plan the activities of the project and monitor progress against the initial quality criteria;
- Mobilize goods and services to initiative activities, including drafting TORs and work specifications;
- Manage requests for the provision of financial resources by UNDP, using advance of funds, direct payments, or reimbursement;
- Manage and monitor the project risks, submit new risks to the Project Board for consideration and decision on possible actions if required; update the status of these risks by maintaining the Project Risks Log;
- Be responsible for managing issues and requests for change by maintaining an Issues Log;
- Prepare the quarterly and annual financial and progress reports and submit the reports to the Project Board, UNDP and GEF;
- Monitors the implementation of project components, analyses problems that hamper their implementation and takes appropriate measures to ensure timely delivery of required inputs and achievement of project-wide results;
- Monitors and reports to UNDP on all financial and procurement matters of the project, including proper utilization of funds and delivery, budget revisions, availability of funds, reconciliation of accounts, establishment of internal control mechanisms. Acts as a focal point to liaise with auditors and ensures follow-up actions. Ensures the accuracy and reliability of financial information and reporting;
- Monitors and facilitates advocacy and mass media outreach activities, writing of success stories, newspapers coverage, PR campaigns;
- Organize workshops, seminars and round tables to introduce project outputs to all stakeholders involved. Render support to related UNDP thematic activities such as publications, sharing of knowledge and group discussions;
- Liaises with other UNDP and UNDP-GEF funded projects to implement possible synergies.

**Closing a Project**

- Ensure proper operational, financial and programmatic closure of the project;
- Prepare Final Project Review Reports to be submitted to the Project Board and the Outcome Board;
- Identify follow-on actions and submit them for consideration to the Project Board; Manage the transfer of project deliverables, documents, files, equipment and materials to national beneficiaries;
- Prepare final CDR for signature by UNDP and the Implementing Partner.

<b>IV. Recruitment Qualifications</b>	
Education:	Masters degree in any of the following areas: Chemicals, Natural Resources Management, Business Administration, Management or a related field.
Experience:	At least 5-years relevant experience. Working experience in international organizations is an advantage.
Language Requirements:	Excellent command of spoken and written English, Tajik and Russian are essential
Others:	Understanding of development issues, national public institutional arrangements, knowledge of and experience in gender mainstreaming is an asset; Initiative and strong leadership skills; Result and client-orientations; Strong analytical, communication and management skills; Excellent interpersonal and cross cultural communication skills, ability to work in a team and to work under pressure and with tight deadlines, ethics

	and honesty; Ability to use information and communication technology as a tool and resource
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## 2. Administrative and Finance Assistant

I. Position Information	
Position Title:	Administrative and Finance Assistant
SC range:	SC-6
Project Title:	
Duration of the service:	1 year (with possible extension subject to satisfactory performance)
Work status	Full-time
Reports To:	Project Manager

II. Background
Under direct supervision of Project Manager, AFA is fully responsible for operational and programmatic management of the project according to the project document, UNDP corporate rules and procedures and for fulfilling the following functions.

III. Functions / Key Outputs Expected
<ul style="list-style-type: none"> <li>• Be responsible for logistics, procurement, finance and recruitment for the project, in accordance with corporate UNDP rules and regulations;</li> <li>• Prepare all financial and administrative documents related to the project implementation;</li> <li>• Develop quarterly and annual budget plans for recruitment of personnel; maintain financial records and monitoring systems to record and reconcile expenditures, balances, payments and other data for day-to-day transaction and reports;</li> <li>• Advise and assist Project staff, experts and consultants on all respects of allowances, salary advances, travel claims and other financial and administrative matters, and calculate and authorize payments due for claims and services;</li> <li>• Prepare detailed cost estimates and participates in budget analysis and projections as required to handle all financial operations of the project office and reconcile all accounts in required time frame;</li> <li>• Maintain, update and transmit inventory records of non-expendable equipment in accordance with UNDP rules;</li> <li>• Perform cash custodian's duties being primarily responsible for project's cash disbursements and maintain project's petty cash book and payrolls related to the regional offices;</li> <li>• Ensure leave monitoring of project staff, check the accuracy and proper completion of monthly leave reports;</li> <li>• Analyze the potential problems concerning administrative-financial issues and take respective measures to provide adequate project's resources in time for implementation of the project activities;</li> <li>• Define the cost-effective measures for optimal use of resources of the project;</li> <li>• Ensure full compliance of administrative and financial processes and financial records with UNDP rules, regulations, policies and strategies;</li> <li>• Encourage awareness of and promotion of gender equality among project staff and partners;</li> <li>• Perform other duties related to personnel, administrative and financial issues of project as required.</li> </ul>

IV. Recruitment Qualifications	
Education:	Higher education in any of the following areas: Economics, Finance, Business administration, Management or a related field.
Experience:	At least 3-years relevant experience. Working experience in international organizations is an advantage.
Language Requirements:	Fluency in English, Russian and Tajik
Others:	Strong analytical, communication and management skills, result and client-orientation, ability to work in a team; Ability to work under pressure and with tight deadlines, ethics and

	honesty; Ability to use information and communication technology as a tool and resource; Experience in handling web-based management systems Ability to handle multiple tasks simultaneously and ability to prioritize
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## 5. PR Specialist

I. Position Information	
Position Title:	PR Specialist
SC range:	SC-8
Project Title/Department:	
Duration of the service:	1 year (with possible extension subject to satisfactory performance)
Work status	Full-time
Reports To:	Project Manager

II. Background

II. Functions / Key Outputs Expected
<ul style="list-style-type: none"> <li>• Design and undertake promotional campaign to disseminate results of the project among municipalities, building industry professionals, other decision-makers and building occupants.</li> <li>• Develop and implement the project PR strategy and annual plan of PR activities;</li> <li>• Develop and submit to the Project Manager consideration of scenarios for the annual video clips, TV and radio airing programs;</li> <li>• Coordinate the PR activity in the area of development and dissemination of a wide range of information and promotional materials to inform all stakeholders and promote Project's activities;</li> <li>• In consultation with the Project Manager organize various PR events including roundtable discussions, workshops, seminars and forums;</li> <li>• Ensure that project PR activities contributes to the promotion of gender equality by reaching, involving and benefiting both women and men (gender mainstreaming);</li> <li>• Maintain Project's web-portal to make sure that it is kept up-to-date and upload materials of the events according to set requirements;</li> <li>• Liaise with UNDP Communication and Outreach Specialist to ensure regular and timely publicity of the Project's activities and outputs in the UNDP web-site;</li> <li>• Develop and submit to the Project Manager recommendations on new feasible solutions and promotional materials for increasing overall visibility of the Project's activities;</li> <li>• Report to the Project Manager on achieved results within PR and Outreach activities;</li> <li>• Build and maintain close contact with representatives from print and broadcast mass media;</li> <li>• Assist the Project Manager in organizing the workshops, seminars and round tables;</li> <li>• Ensure wide coverage of the events in the media through involvement of representatives from print and broadcast mass media to these events;</li> <li>• Prepare and publish the project newsletter, articles and press-releases on the Project's activities and accomplishments for national/international printed and electronic media;</li> <li>• Ensure that all publications and promo-materials are designed in line with UNDP Style and Graphic Standards;</li> <li>• Perform other duties as requested.</li> </ul>

IV. Recruitment Qualifications	
Education:	University Degree in public relations/economics/journalism obtained at recognized institutions or other academic distinction related to

	above requirements.
Experience:	At least 3 years of progressive work experience relevant to the above requirements, including experience of arranging and providing media coverage of round-tables/seminars. Working experience in international organizations is advantage. Experience in web content development is an asset
Language Requirements:	Proficient in English, Russian and Tajik
Others:	Strong analytical, communication and management skills, client-orientation, ability to work in a team; Initiative, analytical judgment, ability to work under pressure and with tight deadlines, ethics and honesty; Ability to use information and communication technology as a tool and resource.

## 6. Driver with own vehicle

<b>I. Job Information</b>	
Job title:	Driver with own vehicle
SC range:	SC-2
Project Title:	
Duration of the service:	1 year (with possible extension subject to satisfactory performance)
Work status (full time / part time):	Full time
Reports To:	Project Manager

<b>II. Background</b>

<b>II. Functions / Key Outputs Expected</b>
<p><i>Operational Functions:</i></p> <ul style="list-style-type: none"> <li>• Drive own vehicle for the transport of authorized personnel;</li> <li>• Deliver and collect mail, documents and other items, meet official personnel at the airport and facilitates immigration and custom formalities and make errands for the project as required;</li> <li>• Be responsible for the day-to-day maintenance of the assigned vehicle, checks oil, water, battery, brakes, tires, etc;</li> <li>• Perform minor repairs and arranges for another repairs;</li> <li>• Ensure that the vehicle is kept clean; log official trips, daily mileage, gas consumption, oil changes, greasing;</li> <li>• Ensure that the steps required by rules and regulations are taken in case of involvement in accident;</li> <li>• Perform other duties, as required by Project Manager;</li> <li>• Perform other duties and responsibilities as required.</li> </ul>

<b>IV. Qualification Requirements</b>	
Education:	Secondary education
Experience:	At least 5 years of relevant work experience. Working experience with governmental agencies and work in any international organization is an advantage.
Language Requirements:	Proficiency in Tajik and Russian. Basic knowledge of English.