



# MIDTERM REVIEW OF THE UNDP-GEF FULL SIZED PROJECT

## Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region

## (Belarus, Tajikistan, Ukraine, Uzbekistan)

**Final Report**

**Prepared by**

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**Date: August 17, 2016**

**Project Information Table**

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|---|---|---|---|
| **Project Title** | PIMS 4309 (FSP): "Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region" | | |
| **UNDP Project ID (PIMS #):** | 4309 | **PIF Approval Date:** | 7 May 2010 |
| **GEF Project ID (PMIS #):** | 4102 | **CEO Endorsement Date:** | 30 August 2012 |
| **ATLAS Business Unit, Award # Proj. ID:** | SVK10, 00066255, 00082456; BLR10, 00070086, 00084272; TJK10, 00066625, 00082745; UKR10, 00066300,00082497; UZB10, 00063869, 00080735 | **Project Document (ProDoc) Signature Date (date project began):** | Regional Project: 22 February 2013<br>Belarus: 15 May 2013<br>Tajikistan: 8 May 2013<br>Ukraine: 29 May 2013<br>Uzbekistan: 30 July 2013 |
| **Country(ies):** | Belarus, Tajikistan, Uzbekistan, Ukraine | **Date project manager hired:** | Regional Project: October 2015<br>Belarus: 1 August, 2013<br>Tajikistan: June 2013<br>Ukraine: 5 August, 2013<br>Uzbekistan: August 2014 |
| **Region:** | Europe and Central Asia | **Inception Workshop date:** | 4-5 November 2013 |
| **Focal Area:** | Ozone Depleting Substances | **Midterm Review completion date:** | 17 August, 2016 |
| **GEF Focal Area Strategic Objective:** | ODS-SP1 | **Planned planed closing date:** | 30 July 2015 |
| **Trust Fund [indicate GEF TF, LDCF, SCCF, NPIF]:** | GEF TF | **If revised, proposed op. closing date:** | 31 July 2018 |
| **Executing Agency/Implementing Partner:** | National Ozone Units (NOUs) in partner countries (Belarus and Uzbekistan), UNDP (Tajikistan, Ukraine and Bratislava Regional Center (currently Istanbul Regional Hub)) | | |
| **Other execution partners:** | - | | |
| | | | |
| **Project Financing** | ***at CEO endorsement (US$)*** | ***at Midterm Review (US$)**** | |
| **[1] GEF financing:** | US $9,000,000 | US $4,117,615.29 | |
| **[2] In-kind contribution:** | US $3,645,000 | | |
| **[3] Government:** | US $5,400,000 | | |
| **[4] Other partners:** | US $20,095,000 | | |
| **[5] Total co-financing [2 + 3+ 4]:** | US $25,445,000 | US $6,152,948.69 | |
| **PROJECT TOTAL COSTS [1 + 5]** | US $34,445,000 | US $10,270,563.98 | |

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**Abbreviations and Acronyms**

| | |
|---|---|
| A/C | Air-Conditioning |
| AWP | Annual Work Plan |
| BRC | Bratislava Regional Centre |
| CEIT | Countries with Economies in Transition |
| CEO | Chief Executive Officer (of the GEF Secretariat) |
| CEP | Committee for Environmental Protection |
| CFC | Chlorofluorocarbon |
| CIS | Commonwealth of Independent States |
| CO | Country Office (UNDP) |
| DIM | Direct Implementation Modality |
| ECA | Europe Central Asia |
| EEU | Environment and Energy Unit (UNDP) |
| EOL | End of Life |
| FSP | Full Size Project |
| GEF | Global Environment Facility |
| GHG | Green House Gases |
| GWP | Global Warming Potential |
| HCFC | Hydrochlorofluorocarbon |
| HFC | Hydrofluorocarbon |
| IRH | Istanbul Regional Hub (IRH) |
| IS | Institutional Strengthening |
| LPAC | Local Project Appraisal Committee (UNDP) |
| M&E | Monitoring and Evaluation |
| MLF | Multilateral Fund (of the Montreal Protocol) |
| MENR | Ministry of Ecology and Natural Resources (Ukraine) |
| MNREP | Ministries of Natural Resources and Environment (Belarus) |
| MP | Montreal Protocol |
| MPU | Montreal Protocol Unit (UNDP) |
| MT | Metric Tonne |
| MTR | Mid Term Review |
| MOP | Meeting of the Parties |
| MOU | Memorandum of Understanding |
| NIM | National Implementation Modality |
| NOC | National Ozone Committee |
| PIC | Prior Informed Consent |
| PIMS | Project Implementation Management System |
| PIR | Project Implementation Review |
| PM | Project Manager |
| PU | Poly Urethane (foam) |
| ODP | Ozone Depleting Potential |
| ODS | Ozone Depleting Substance |
| RAC | Refrigeration and Air-Conditioning |
| SCNP | State Committee for Nature Protection |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| XPS | Extruded Polystyrene (foam) |

## 1. Executive Summary

The Mid Term Review of the GEF/UNDP FSP Project: Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (Belarus, Tajikistan, Ukraine and Uzbekistan) was conducted by an independent consultant between mid-March and mid-June 2016. It was guided by the Strategic Program I for GEF-4: Phasing out HCFCs and Strengthening of Capacities and Institutions. During GEF-4 the GEF's principal objective was to assist eligible countries in meeting their obligations under the Montreal Protocol and strengthening capacities and institutions in those countries that still are faced with difficulties in meeting their reporting obligations.

MTRs are a mandatory requirement for all GEF-financed full-sized projects (FSP) and must be submitted with the third PIR.

The purpose of the Mid Term Review was to assess the following four categories of project progress and produce a draft and final MTR report.

- Project strategy (including Project Design and Project Framework/Logframe)
- Progress towards results
- Project Implementation and Adaptive Management
- Sustainability

In addition to the above the MTR includes evidence based conclusions and recommendations for critical intervention that are specific, measurable, achievable, and relevant.

The document is organized in four sections, namely:

Section 1: Introduction
Section 2: Project Description & Background Context
Section 3: Findings
Section 4: Conclusions and recommendations.

Documents relevant to the evaluation and its results are attached as annexes to the document.

### Section 1: Introduction

The introduction provides some historical perspective to the project, the purpose of the evaluation as well as the methodology used in line with the terms of reference.

### Section 2: Project Description

The project is a follow up to the GEF regional HCFC MSP project which helped develop detailed survey data on HCFCs in CEITs and full HCFC phase-out strategies were developed except for Ukraine to meet the compliance targets. Overall, this project serves to sustain the initial GEF-4 work in four CEITs committed to move forward with accelerated phase-out and prepare for more targeted investment action, all in coordination with parallel work financed in Article 5 countries in the region undertaking under the MLF. The principal issue in achieving and sustaining compliance with accelerated HCFC phase out in the subject CEIT countries is curtailment of the continued rapid growth in HCFC consumption in the region particularly that associated with refrigeration servicing, and to start a long term process of reversing it. This requires immediate action in laying the institutional and regulatory groundwork, and

formalizing national commitments and action plans entrenched in national policy, building institutional and technical capacity, and undertaking targeted investment in converting direct sources of consumption and in the refrigeration servicing and refrigerant management infrastructure.

The assistance from the GEF Trust Fund for this FSP was US$ 9,000,000. Table 1 below shows a summary of financial resources to be mobilized for the countries at the time of project approval.

**Table 1: Summary of Financial Resources Mobilized in the CEITs for Phasing Out HCFCs through the GEF/UNDP Project: Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (Belarus, Tajikistan, Ukraine and Uzbekistan)**

| Country | GEF Trust Funds (Million US$) | Co-Financing Funds (Million US$) | Total (Million US$) |
|---|---|---|---|
| Regional Component | 1.080 | 0.000 | 0.900 |
| Belarus | 2.200 | 6.895 | 9.095 |
| Tajikistan* | 1.100 | 3.600 | 4.700 |
| Ukraine | 3.190 | 9.900 | 13.090 |
| Uzbekistan** | 1.430 | 4.900 | 6.330 |
| Total | 9.000 | 25.295 | 34.295 |

* Tajikistan also received $100,000 from UNDP CO TRAC Funds as co-finance.
** Uzbekistan also received $250,000 from UNDP CO TRAC Funds as co-finance.

**Section 3: Findings**

In this section the results of analysis done on the various aspects of the projects implementation and monitoring as required under the TOR have been provided. The Mid-Term Review Ratings and Achievements have been summarised in Table 3 below. They have been rated according to the rating scales in Table 2 below.

**Table 2: RATING SCALES**

| Ratings for Progress Towards Results | | Ratings for Project Implementation & Adaptive Management | | Ratings for Sustainability | |
|---|---|---|---|---|---|
| 6 | Highly Satisfactory (HS): No major shortcomings | 6 | Highly Satisfactory (HS): No major shortcomings | 4 | Likely (L): Negligible risks to sustainability |
| 5 | Satisfactory (S): Minor shortcomings | 5 | Satisfactory (S): Minor shortcomings | 3 | Moderately Likely (ML): Moderate risks |
| 4 | Moderately Satisfactory (MS): Significant shortcomings | 4 | Moderately Satisfactory (MS): Significant shortcomings | 2 | Moderately Unlikely (MU): Significant risks |
| 3 | Moderately Unsatisfactory (HU): Major shortcomings | 3 | Moderately Unsatisfactory (HU): Major shortcomings | 1 | Unlikely (U): Severe risks |
| 2 | Unsatisfactory (U): will not achieve end of project targets | 2 | Unsatisfactory (U): will not achieve end of project targets | | |
| 1 | Highly Unsatisfactory (HU): Not met any targets, will not achieve end of project targets | 1 | Highly Unsatisfactory (HU): Not met any targets, will not achieve end of project targets | | |

**Table 3: MTR Ratings & Achievement Summary Table for Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (Belarus, Tajikistan, Ukraine and Uzbekistan)**

| Measure | MTR Rating | Achievement Description |
|---|---|---|
| **Project Strategy** | N/A | |
| **Progress Towards Results** | Objective Achievement Rating: (rate 6 pt. scale) | |
| | Outcome 1a Achievement Rating: 6 (HS) | All activities completed. |
| | Outcome 1b Achievement Rating: 6 (HS) | Most activities completed. Identification and translation of UNEP documents to Russian pending. Work needs to be done on setting up a formal Prior Informed Consent (PIC) network. |
| | Outcome 1c Achievement Rating: 6 (HS) | Most activities completed as planned. Additional training programs on natural refrigerants are planned. Identified UNEP resources for RAC technical documents to be translated into Russian. |
| | Outcome 1d Achievement Rating: 6 (HS) | Activities progressing satisfactorily |
| | Outcome 2 (All Countries) Achievement Rating: 5 (S) | The achievement rating is impacted by slow progress in Ukraine. All other countries have developed and endorsed or close to endorsing their formal HCFC Phase-out strategy and action plan. |
| | Targeted HCFC Phase-out Investment Program and Demonstration projects – Belarus Achievement Rating: 6 (HS) | Most activities nearly completed. What remains is follow-up with the activities being completed. Data on recovery/recycling needs to be compiled on a regular basis. |
| | Targeted HCFC Phase-out Investment Program and Demonstration projects – Tajikistan Achievement Rating: 6 (HS) | All activities as planned are either completed or ongoing. Demonstration retrofit projects to alternative refrigerants need to be started. |
| | Targeted HCFC Phase-out Investment Program and Demonstration projects – Ukraine Achievement Rating: 4 (MS) | One investment project which was revised is ongoing, one company went bankrupt and two cancelled due to political situation. Data collection ongoing which is expected to identify ineligible foam manufacturers (PU and XPS) companies for information exchange on HCFC substitute technologies, as well as a survey for the servicing sector is ongoing. Stage II of the project will be prepared taking all the activities into account. No MOU with government, as a result no ownership of project by government as yet. |

| | | |
|---|---|---|
| | Targeted HCFC Phase-out Investment Program and Demonstration projects – Uzbekistan<br>Achievement Rating: 6 (HS) | All activities as planned are ongoing. Demonstration projects to be started. Safety standards for alternative refrigerants to be developed. Recovery equipment distribution to service companies to be done. Regarding ODS Pilot Destruction project: Based on Chinese experience and results of economic analysis of cost-effectiveness of the equipment, it was decided to procure small-scale/mobile ODS destruction unit, preferably "Plasma X". However, the manufacturer of "Plasma X" ASADA Corp informed about discontinuing small-scale/mobile ODS destruction unit with no resuming plans. Other manufacturers of plasma type ODS destruction equipment proposed prices at least four-five times greater than the project allocated budget amount. Thus, implementation of the project activities on pilot destruction of obsolete ODS delayed and project strategy on ODS destruction might be changed due to absence of proper ODS destruction equipment and technologies which can be procured within the planned project budget for piloting destruction of obsolete ODS. The project is developing report with all possible further actions of obsolete ODS management in Uzbekistan, which will be reviewed by the Project Board during its next meeting in September-October 2016. |
| | Outcome 3<br>Achievement Rating: 6 (HS) | Monitoring and evaluation activities ongoing. Mid Term Review completed |
| **Project Implementation & Adaptive Management** | Rating: 6 HS | Despite initial startup delays, all projects (except Ukraine) are progressing as planned in the project document. |
| **Sustainability** | 3 ML | There are some financial risks to sustainability after projects are closed in the countries. In addition, there are political risks to sustainability with respect to Ukraine. |

## Section 4: Conclusions and recommendations

### 5.1 Conclusions

The conclusions are integrated into the body of the report at relevant location. Detailed conclusions are provided in the "Justification for Rating" column of the attached Progress Towards Outcome Analysis at Annex 1.

### 5.2 Recommendations

General

1. The UNEP documents to be translated into Russian should be identified and work started as soon as possible, particularly the resources for RAC technical documents.
2. In Uzbekistan and Ukraine, UNDP and government need to come to some arrangement on how grant equipment procured under the project can be transferred without any financial repercussions to the beneficiaries.
3. Sustainability of training of technicians can become an issue once the project is over. The training institutions should develop and put in place plans to recover costs from future trainees.
4. In Tajikistan and Uzbekistan (if ODS destruction project funds are to be used for Demonstration projects), where the pilot retrofit/replacement incentive program studies are to be started the approach to take within the funding available should be completed quickly and some project(s) initiated.

Customs

5. Countries may want to consider discussing with Customs about ODS import documents being approved by NOU/responsible body of environment before Customs releases consignment. The data from each transaction can be entered into a database maintained by the environment body and reviewed regularly to see how a company is performing vis a vis it's annual quota.

Legislation/Regulations

6. Following Legislation/Regulations should be considered to be put in place:

    a. Countries should consider bans on import of single use cylinders. In Belarus, legislation has been put in place to ban import of single use cylinders and it has come into effect from January 2016. A follow up should be maintained to ensure that importers are aware that their purchase orders for refrigerant include this requirement, particularly from Chinese suppliers.
    b. All countries should implement a ban on equipment containing or working on ODS at the earliest possible to reduce the service tail for HCFCs.
    c. Current regulations address ODS only when issuing operating licenses to companies. The regulation should be amended to include all refrigerants, since hydrocarbons, ammonia and other flammable refrigerants will/are coming into the market.
    d. Regulations related to waste from production and use should be amended to include End of Life (EOL) equipment.

Follow Up

7. All countries are facing problems importing HCFC standards for their gas analysers. It is believed that Turkey has been able to develop a methodology for import of these standards. The information should be obtained and disseminated to all the partner countries.
8. In Belarus, close follow up should be maintained with MAZ-Kupava, the company which is implementing a foam project, to ensure that payments are made to the equipment supplier on time and the equipment is installed and commissioned before the end of the year.
9. The demonstration projects in all countries should be followed till completion and documentation made of the technical issues and resolutions and lessons learnt for wider dissemination nationally and with other countries in the region.
10. Maintain a follow up on the Recovery/Recycling centers to find out how they are operating and have them report on the quantities recovered and recycled on a quarterly/half yearly basis.

# 2. Introduction

## 2.1 Background

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 or MP). 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 Protocol entered into force on 1 January 1989.

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 to 25% of the baseline in 2010.

A number of GEF CEIT countries fall under Article 2 of the Montreal Protocol, and are generally eligible for GEF funding in support of HCFC phase out, subject to having ratified the Copenhagen amendment, which is the case for the four (4) participating countries: Belarus, Tajikistan, Uzbekistan and Ukraine. A GEF regional HCFC Medium Sized Project helped develop detailed survey data on HCFCs in CEITs resulting in full HCFC phase-out strategy drafts for all countries except Ukraine which would help to meet their compliance targets.

The current FSP which started on July 30, 2013 - Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (Belarus, Tajikistan, Ukraine and Uzbekistan) - is a response to the obligations incurred by participating countries (Belarus, Tajikistan, Ukraine and Uzbekistan) under their respective phase out schedule for HCFCs of the Montreal Protocol. It is a timely capacity building effort (with investment elements for the manufacturing, where existing, and servicing sectors) designed to improve regulatory measures to help address the accelerated HCFC phase-out in the medium and longer term, and to strengthen the preparedness for the complete phase-out of HCFCs from current use.

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## 2.2 Purpose of the Mid Term Review

MTRs are a mandatory requirement for all GEF-financed full-sized projects (FSP) and must be submitted with the third PIR.

The UNDP-GEF Midterm Review (MTR) of the full-sized project titled "Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (Belarus, Tajikistan, Ukraine and Uzbekistan)" (PIMS 4309) implemented through the UNDP Istanbul Regional Hub, and UNDP Country Offices in respective partner countries, was guided by the Strategic Program I for GEF-4: Phasing out HCFCs and Strengthening of Capacities and Institutions**.** During GEF-4 the GEF's principal objective was to assist eligible countries in meeting their obligations under the Montreal Protocol and strengthening capacities and institutions in those countries that still are faced with difficulties in meeting their reporting obligations.

The purpose of the Mid Term Review was to assess the following four categories of project progress and produce a draft and final MTR report.

- Project strategy (including Project Design and Project Framework/Logframe)
- Progress towards results
- Project Implementation and Adaptive Management
- Sustainability

In addition to the above the MTR was expected to include evidence-based conclusions and recommendations for critical intervention that are specific, measurable, achievable, and relevant.

## 2.3 Scope and Methodology

### 2.3(a) Scope

The Mid-Term Review covered all activities proposed to be undertaken within the framework of the project as described in the project's results framework. Thus it covered the three main components of the project proposal, namely:

- Component 1 - Development of collective institutional strengthening and capacity building tools required to implement effective technical and regulatory capacity building. The component is essentially an enabling activity providing an efficient method of developing and disseminating common capacity building tools as described below in the form of documentation, and a "train the trainers" resource base for direct use in Component 2 – a national component. The products will also be offered more broadly to other Russian speaking non-Article 5 countries and be coordinated with parallel MLF financed capacity building and institutional strengthening in Russian-speaking Article 5 countries in the region.

- Component 2 - Nationally oriented including national level capacity building and training and initial phase out and infrastructure investment that should expand in GEF-5. Component 2 targets four GEF eligible countries (Belarus, Tajikistan, Ukraine and Uzbekistan) for country specific capacity building and investment in manufacturing and servicing sectors.

Component 3 - Monitoring and evaluation (M&E) activities.

The outputs achieved till December 31, 2015 against the planned outputs were compared and assessed to determine their contribution to the achievement of the project objectives. The outputs achieved through December 31, 2015 against the planned outputs were compared and assessed to determine their contribution to the achievement of the project objectives. The MTR also: monitored project implementation and adaptive management for improving project achievements, identified threats to project sustainability, and provided recommendations on how the project should move forward.

### 2.3(b) Methodology

The Mid-Term Review was conducted in accordance with the guidelines provided in the UNDP Guidance for Conducting Mid-Term Reviews of UNDP-supported, GEF-financed Projects. The findings are presented around the following four areas of Project Strategy, Progress towards Results, Project Implementation and Adaptive Management, and Sustainability, specifically the following.

a) Project Strategy

*Project Design:*

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document.
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results.
- Review how the project addresses country priorities
- Review decision-making processes

*Results Framework/Logframe:*

- Undertake a critical analysis of the project's logframe indicators and targets, assess how "SMART" the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary.
- Examine if progress so far has led to, or could in the future catalyse beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis.

b) Progress Towards Results

- Review the logframe indicators against progress made towards the end-of-project targets; populate the Progress Towards Results Matrix, as described in the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; colour code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for the project objective and each outcome; make recommendations from the areas marked as "not on target to be achieved" (red).
- Compare and analyse the GEF Tracking Tool at the Baseline with the one completed right before the Midterm Review.
- Identify remaining barriers to achieving the project objective.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

c) Project Implementation and Adaptive Management

Using the *Guidance for Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; assess the following categories of project progress:

- Management Arrangements
- Work Planning
- Finance and co-finance
- Project-level monitoring and evaluation systems
- Stakeholder Engagement
- Reporting
- Communications

d) Sustainability

Assess overall risks to sustainability factors of the project in terms of the following four categories:

- Financial risks to sustainability
- Socio-economic risks to sustainability

- Institutional framework and governance risks to sustainability
- Environmental risks to sustainability

A list of draft discussion points was prepared covering the following headings:

- HCFC Phase Out Targets
- Legislative and Policy Options for HCFC control and phase-out
- Prior Informed Consent (PIC)
- Standards
- Gender Mainstreaming
- Training of Customs and Environmental/Technical Inspection authorities
- Training of Technicians
- Regional Cooperation
- Investment Projects (conversion of manufacturers using HCFCs to non HCFC and demonstration retrofit projects)
- Recovery/Recycling/Reclaim
- ODS Waste
- Awareness
- Monitoring and Evaluation
- Project Management

All relevant documents provided by UNDP Istanbul Regional Hub and by the Project Managers of Belarus, Tajikistan, Ukraine and Uzbekistan were reviewed. These included the Project Document submitted to GEF, the annual PIRs, the national HCFC Phase-Out Plans of Belarus, Tajikistan and Uzbekistan (Ukraine is still preparing their plan), relevant workshop reports and reports of international consultants. The list of documents is provided in Annex 7

Interviews were conducted with all persons associated with the project in all the countries. In several countries, interpreters were provided by the Project offices to translate from Russian to English and vice versa.

In addition to the guidelines in the TOR, the consultant also used his knowledge and experience of HPMP project preparations and evaluation of various MLF projects related to ODS phase-out. Annex 3 Draft Discussion Points for MTR was used as the basis for the discussions.

### 2.4 Structure of the Mid Term Review Report

The structure of the Mid Term Review report follows the outline provided in the Terms of Reference and in "Guidance for Conducting Mid Term Reviews of UNDP-Supported, GEF Financed Projects".

## 3. Project Description and Background Context

### 3.1 Background Context

This FSP project (4102) is a follow-up to the GEF MSP regional HCFC project (3597) which helped develop detailed survey data on HCFCs in CEITs and HCFC phase-out strategies to meet the compliance targets. Overall, this project, also under GEF-4, served to sustain the initial GEF-4 work in four CEITs committed to move forward with accelerated phase-out and prepare for more targeted investment action, all in coordination with parallel work financed in Article 5 countries in the region undertaking under the MLF.

This initial work has identified that the principal issue in achieving and sustaining compliance with accelerated HCFC phase-out in the subject CEIT countries is curtailment of the continued rapid growth in HCFC consumption in the region particularly the one associated with refrigeration servicing; and to start a long-term process of reversing it. This requires immediate action in laying the institutional and regulatory groundworks, and formalizing national commitments and action plans entrenched in national policy, building institutional and technical capacity, and undertaking targeted investment in converting direct sources of consumption and in the refrigeration servicing and refrigerant management infrastructure.

More specifically, the HCFC survey studies in the participating countries during 2010 - 2012 identified the following trends across the region as important in guiding country phase-out strategies and taking action on them:

- Overall HCFC consumption has been on an increasing trend with the majority (>80%) of it attributable to XPS production establishment that has taken place since 2008 in Ukraine and the recent rapid growth in refrigeration servicing demand in all countries, principally for HCFC-22 and somewhat for mixtures, created by a relatively new and expanding inventory of HCFC-based (and primarily imported) equipment over the last several years;
- A number of countries have been challenged in meeting their 2010 phase-out obligations and most will have difficulty meeting the 2015 phase-out obligations, in the absence of rapid action to control of HCFCs use and specifically the continued installation of new and mainly imported HCFC-containing equipment;
- Consumption as previously and even currently reported to the Ozone Secretariat has certain inaccuracies in some cases for a variety of country-specific reasons, making the basis for compliance assessment problematic in some cases. Example of that would be previous underreporting by Belarus due to inability to capture imports (related to Customs Union with Russia) and by Ukraine due to lost institutional capacity and dysfunctional HCFC licensing system;
- Participating countries required priority support for implementation of regulatory action on control measures, improved customs control capacity, expanded coverage in licensing systems, technological conversions to non-ODS/low GWP technologies, enhanced awareness of 'natural' and low GHG alternatives, and strengthening of their refrigeration servicing sectors, all targeting control and management of HCFCs/HCFC containing equipment, to meet these challenges; and
- Other than XPS, additional HCFC use in manufacturing, where it exists, accounts for a smaller portion of HCFC consumption if calculated in metric tons (MT); however, it is all based on HCFC-141b - a highly potent ODS - that tend to balance the impact in ODP units. This consumption was found in rigid foam, polyol blending and solvent sectors with associated challenges related to technology substitution in the latter two categories due to (1) wide range of polyol application by a relatively large number of small users and (2) solvent efficiency not matched by other technologies available on the local markets.

The above observations suggested that the response required for HCFC phase-out in CEITs had to be somewhat different than that applied previously for Annex A and B substance phase-out where the GEF's support made a major contribution. Previously, the bulk of targeted ODS consumption could be directly addressed with large scale investment in the manufacturing sector primarily in large enterprises and the result was achieved without a strong linkage to technical and regulatory capacity building. With exception of Ukraine at this moment, in the current HCFC phase-out process, there is less opportunity to achieve large reductions in consumption with direct manufacturing investment (only a few enterprises) and a

stronger linkage to capacity building in order to support refrigeration servicing and put in place the kinds of regulatory and market tools necessary to address the substantial accumulated service demand.

### 3.2 Development context: environmental, socio-economic, institutional, and policy factors relevant to the project objective and scope

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

- Countries' compliance with the Montreal Protocol by (1) phasing out HCFC consumption – a reduction of 77 ODP tons annually (308 MT) of HCFCs (manufacturing and servicing) for period of 2011-2014 is planned by the project – and (2) sustaining the capacities not to increase HCFC consumption in future due to latent demand resulting from increased servicing;
- Strengthened institutional capacities to improve decision-making related to HCFC phase-out approaches and to exercise effective regulatory controls over the end use and 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 environmental inspectors to monitor and control HCFC end use and of Customs to detect HCFCs/blends/equipment 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;
- Technological conversions in the manufacturing sector with selection of low GWP technologies such as methyl formate, methylal/water, carbon dioxide, c-pentane;
- Improved Recovery/Recycling/Reclaim infrastructure to help strengthen the HCFC re-use scheme in to minimize the need for HCFC import and reduce HCFC emissions into the atmosphere;
- Strengthened unwanted ODS waste storage capacity 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;
- Pilot destruction demonstration projects in Belarus and Uzbekistan aiming to destroy unusable and/or contaminated/unrecognizable blends. No longer being considered;
- 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, which 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 (Environmental Protection and Customs departments) to strengthen overall sound chemicals management concepts.

### 3.3 Key Barriers

Participating countries have faced some gaps related to lack of technical assistance to continue with the implementation of Montreal Protocol obligations and this emphasizes the need to international support.
At a more specific level, the following table summarizes the main barriers identified for each country.

**Table 4: Key Barriers**

| Belarus | Tajikistan | Uzbekistan | Ukraine |
|---|---|---|---|
| Sustainability of institutional capacity | | | |
| Refrigerant management capacity and wide fragmentation of the servicing sectors | | | |
| HCFC consumption in the manufacturing sector that requires technical assistance | | Continued illegal trade in ODS and mislabeling of containers | Partial eligibility of the manufacturing sector which is the principal HCFC consumer |
| Absence of ability to effectively limit import of HCFC containing equipment that creates a long-term HCFC "consumption bubble" | | | |
| Current Import Licensing System is ineffective and unsuitable for Consumption Reporting | | | Weak interdepartmental coordination and enforcement capacity with weak import controls |
| Lack of ability to monitor the incoming ODS materials in gas containers | | | |
| Limited introduction of low GWP and energy efficient technologies | | | |
| Lack of capability to address the growing amounts of unwanted ODSs | Continued illegal trade in ODS and mislabeling of containers | Lack of capability to address the growing amounts of unwanted ODSs | |
| | | | Historical creditability issues in terms of demonstration of compliance with Montreal Protocol obligations |
| | | | Weak interest from HCFC end-users to cooperate with the Government |

### 3.4 Project Description and Strategy

The regional GEF Full-Scale Project (FSP) is a response to the challenges identified in the participating countries as related to HCFC phase-out. It builds on past CFC phase-out efforts and recent preparatory activities, and represents a package of tailored technical assistance to help each country address HCFC related challenges.

Overall, the project is a response to the obligations under the phase-out schedule of HCFCs under 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, and a timely capacity building effort (with investment elements in manufacturing and servicing sectors).

The project consists of two overall assistance components and a component on Monitoring and Evaluation (M&E).

- Component 1 addressing development of collective institutional strengthening and capacity building tools required to implement effective technical and regulatory capacity building. The component is essentially an enabling activity.
- Providing an efficient method of developing and disseminating common capacity building tools as described in the form of documentation, and a "train the trainers" resource base for direct use in Component 2 – a national component. The products will also be offered more broadly to other Russian speaking non-Article 5 countries and be coordinated with parallel MLF financed capacity building and institutional strengthening in Russian Speaking Article 5 countries in the region.

- Component 2 is nationally-oriented including national level capacity building and training and initial phase-out and infrastructure investment that should expand in GEF-5. Component 2 targets four GEF eligible countries (Belarus, Tajikistan, Ukraine and Uzbekistan) for country-specific capacity building and investment in manufacturing and servicing sectors.

- Component 3 covers monitoring and evaluation (M&E) activities.

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

The regional component aims to provide common Russian language regulatory guidance, "train the trainers" opportunities related to regulatory enforcement, customs control, expanded licensing and integration of HCFC Phase-out with energy efficiency/GHG reduction, training materials for transfer to national level programs, and expanded country exposure within the existing ECA network. It has been developed to build on the tools and networks currently in place for some CEITs and the Article 5 countries in the Commonwealth of Independent States (CIS) and is to be accessible to all non-Article 5 CIS countries in the region, although direct participatory funding support will be confined to the four countries participating in this project (Belarus, Tajikistan, Ukraine and Uzbekistan).

At the regulatory level, the country specific components will ensure the implementation of enhanced HCFC regulation/import control, enhanced licensing systems, and introduction of HFC monitoring inclusive of enforcement training. These components will be complemented by training to strengthen enforcement (environmental and customs officers to control HCFC end-use and imports) and operational refrigeration-servicing sectors (training, certification, RAC Association), including promotion of energy efficiency and GHG reductions during servicing.

In addition, under this component, investment programs will cover technological conversions in solvent and rigid foam sectors, pilot retrofit/replacement incentive programs targeting priority service high-demand sectors. It will also strengthen refrigeration service capacity and optimize chemicals distribution to allow control of container size, as well as prepare collection/storage modalities for destruction facilitated by a pilot destruction project.

Where cost effective/economically sustainable opportunities are identified, pilot investments in direct consumption phase-out will be undertaken specifically in the foam, refrigeration and solvent sectors.

## 3.5 Outcomes and Expected Results

### 3.5.1 Outcome 1 - Regional accelerated phase-out capacity building (four subcomponents)

Outcome 1a - Legislative and Policy Options for HCFC phase-out and control

The countries are provided with information resources and the necessary level of decision maker's 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

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

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 into national institutions.

Outcome 1d - Support for the development of regional institutions, capacity, and cooperation.

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.

### 3.5.2 Outcome 2 - HPMP, National Level Capacity Strengthening and HCFC Phase-Out Investment

Output 2.1: Formal HCFC Phase-out strategy and action plan developed and endorsed

Output 2.2.: Trained and equipped working level Customs and enforcement officials, and refrigeration technicians using resources (trainers and training materials) from Component 1

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

### 3.5.3 OUTCOME 3 - Monitoring, learning, adaptive feedback, outreach and evaluation

Output 3.1: M&E and adaptive management applied to project in response to needs and extract lessons learned

Output 3.2: Lessons learned and best practices are replicated at the national level

## 3.6 Project Implementation Arrangements

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.

Regional project board is composed of:

(1) An executive: UNDP IRH Manager
(2) Senior supplier: Representatives of UNDP MPU/Chemicals Unit and UNDP COs
(3) Senior beneficiary: Representatives of respective Ministries of project countries

Similarly, the national Project Boards have an Executive from the UNDP Country Office, UNDP IRH as the senior supplier for the regional component of the national project, and UNDP CO as the senior supplier for the national components, and members from the Senior Beneficiary consisting primarily of representatives of the respective Ministries.

At both the regional and country levels Project Managers have been appointed. The Project Manager is 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 Project Manager also closely coordinates project activities with relevant government institutions and holds regular consultations with other project stakeholders and partners.

All the countries have appointed National Technical Experts/Coordinators to implement the technical components of the projects.

Specific responsibilities of the Project Board:

1. Initiating a project:
   - Agree on PM's responsibilities, as well as the responsibilities of the other members of the Project Management team;
   - Delegate any Project Assurance function as appropriate;
   - Review and appraise detailed Project Plan and AWP, including Atlas reports covering activity definition, quality criteria, issue log, updated risk log and the monitoring and communication plans.

2. Running a project:
   - Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;
   - Address project issues as raised by the Project Manager;

- Provide guidance and agree on possible countermeasures/management actions to address specific risks;
- Agree on Project Manager's tolerances in the Annual Work Plan and quarterly plans when required;
- Review the Project Annual Review Report, make recommendations for the next AWP, and inform the Outcome Board about the results of the review.
- Review and approve end project report, make recommendations for follow-on actions;
- Provide ad-hoc direction and advice for exception situations when project manager's tolerances are exceeded;
- Assess and decide on project changes through revisions.

3. Closing a project:
- Assure that all Project deliverables have been produced satisfactorily;
- Review and approve the Final Project Review Report, including Lessons-learned;
- Make recommendations for follow-on actions to be submitted to the Outcome Board;
- Commission project evaluation (only when required by partnership agreement)
- Notify operational completion of the project to the Outcome Board.

Project Implementation Modalities

Types of project implementation modalities in this project:

- NIM = National Implementation Modality: Project implemented by National Partner (ex: Government, NGO, etc.)
- DIM = Direct Implementation Modality: Project implemented by UNDP

Modalities of implementations by components:
- Regional: DIM (UNDP IRH)
- Belarus: NIM (Government – MNREP)
- Tajikistan: DIM (UNDP CO)
- Ukraine: DIM (UNDP CO)
- Uzbekistan: NIM (Government – State Committee for Nature Protection)

### 3.7 Project Timing

The project received GEF CEO endorsement/approval on August 30, 2012. The regional and national projects were signed on different dates as follows:

| | |
|---|---|
| Regional Project: | 22 February 2013 |
| Belarus: | 15 May 2013 |
| Tajikistan: | 8 May 2013 |
| Ukraine: | 29 May 2013 |
| Uzbekistan: | 30 July 2013 |

The whole project is considered to be under implementation from the last Project Document signature date, i.e. 30 July 2013.

The originally planned project closing date was February 22, 2016. Based on the progress reports and specific delays in Ukraine (beyond UNDP control) and Uzbekistan (under an expedited implementation plan), resulting in uneven progress in all countries which also had an effect on the regional component,

the project extension request for 2 years was discussed at the regional Project Board meeting with all countries in June 2015 and approved. This request was formally approved by UNDP-GEF to let all components complete the vast majority of planned activities by the latest deadline till 31 July 2018.

### 3.8 Baseline Indicators and Targets

Baseline indicators and targets have been established for the project objectives. They have been used annually to monitor and assess the project's implementation progress. Since the Indicators, Baseline and Targets are the same as in the Progress towards Outcomes Analysis, they are not repeated here for the sake of brevity. Please refer to the Table in Annex 1 below for details.

All the indicators and their baselines are clearly defined as are the targets which are taken from the outputs of the various activities.

### 3.9 Main Stakeholders

The main stakeholders as identified in the Project Documents are listed in the Table below.

**Table 5: Main Stakeholders**

| Country | Main Stakeholders |
|---|---|
| Belarus | Ministries of Natural Resources and Environment, Agriculture and Food Products, Industry, Trade; State Customs Committee, Association of Microclimate and Cold Industry Enterprises, Selected Universities and Vocational Schools, Private/Public Sector HCFC users. |
| Tajikistan | Committee for Environmental Protection under the Government of Tajikistan, State Customs Department, Agency for Standardization, Metrology, Certification and Trade Inspection under the Government of the Republic of Tajikistan (TajikStandard), Ministry of Justice, Ministry of Education, Refrigeration Association, Private sector (servicing, equipment assembly). |
| Ukraine | Ministry of Ecology and Natural Resources, State Environmental Inspectorate, State Customs Committee, Environmental and Customs Academies, All-Ukrainian Construction and Building Material Association, HCFC importers and end-users in the manufacturing sector |
| Uzbekistan | State Committee for Nature Protection, State Customs Committee, Agency "Uzstandard", Ministry of Higher and Secondary Specialized Education, Private/Public sector HCFC users. |

## 4 Findings

### 4.1 Project Strategy

4.1a Project Design

The project design follows similar approaches when HPMPs are written for projects funded by the Multilateral Fund of the Montreal Protocol. All the elements needed for designing a successful HCFC phase-out project are included in the country specific project documents while the common elements have been included in the regional project which makes for efficient financing. Lessons learned from implementation of similar projects by UNDP appear to have been incorporated into the project.

The projects have been designed following the country-specific surveys that were done and are unique for each country's needs to phase-out the consumption of HCFCs. Since each of the participating countries is a signatory to the Montreal Protocol, the projects assist the countries to meet their commitments of phasing out HCFCs within the specified timeframe. As per Decision XIX/6 of the Meeting of the Parties Belarus, Tajikistan, Ukraine and Uzbekistan are required to have completed the accelerated phase-out of production and consumption in 2020, on the basis of the following reduction steps: - a) By 2010 of 75

per cent; (b) By 2015 of 90 per cent; and (c) While allowing 0.5 per cent for servicing the period 2020–2030. The respective Governments are cognizant of their commitments and have taken ownership of their projects (except Ukraine) and it can be confirmed that the project concepts are in line with national development priorities and plans of the countries.

The overall risk rating attached to the project is considered small recognizing previous and current state of the country's response to implementation of the Montreal Protocol.

Climate change risks are associated with the project in part related to the substitution of HCFCs with HFCs with high GWP though the project addresses these risks from the side of substantially improving equipment servicing techniques, and thus avoiding emissions. Further, the project will demonstrate, on a limited basis, non-ODS/low-GWP (such as ammonia, hydrocarbons, carbon dioxide) technologies in refrigerated equipment. This also has an additional balancing effect in showcasing more energy efficient equipment. Finally, in the manufacturing sector, the current use of HCFCs will be substituted with non-ODS/low-GWP technologies such as methyl formate, carbon dioxide and cyclopentane. A component on unwanted ODS destruction was designed in the project to address end-of-life ODSs for two countries (Uzbekistan and Belarus) to set up a complete cycle of ODS management in the country to minimize HCFC (and HFC) emissions into the atmosphere. This has however been cancelled in both countries. Belarus has reallocated the funding towards demonstration projects, and Uzbekistan is in the process of identifying the activities to which the funding can be reallocated.

The following provides an overall risk matrix that identifies specific risks identified.

**Table 6: Risk Matrix**

<table>
<tr><th>BELARUS</th><th>TAJIKISTAN</th><th>UZBEKISTAN</th><th>UKRAINE</th></tr>
<tr><td colspan="4">Government or private/public co-financing commitments do not materialize due to diversion of funding and allocation of staff elsewhere</td></tr>
<tr><td colspan="4">Delays in adopting HCFC phase-out strategy that delays or reduce the effectiveness of other activities related to HCFC phase-out</td></tr>
<tr><td colspan="3">HCFC phase-out is delayed and country is not in compliance with Montreal Protocol in 2015</td><td>Country remains in non-compliance with 2010-2014 HCFC reduction milestones</td></tr>
<tr><td colspan="3">Catalytic effect of demonstrating low GWP technologies is limited due to high cost of new refrigerated equipment</td><td>-</td></tr>
<tr><td>Unwanted ODS quantities are insufficient to fully demonstrate pilot ODS destruction and its benefits for a complete cycle of ODS re-use</td><td>-</td><td>Unwanted ODS quantities are insufficient to fully demonstrate pilot ODS destruction and its benefits for a complete cycle of ODS re-use</td><td>-</td></tr>
</table>

The UNDP Environmental and Social Screening checklist has been completed and no environmental and social issues have been identified. The GEF technical assessment of the project is consistent with other similar projects.

During the project design, national counterparts – line Ministries and Environmental Protection Committees - were consulted for their inputs and the information they provided were incorporated into the project design. Inputs were also obtained from possible beneficiaries.

At the time the project was prepared, submitted and approved by GEF, there was no requirement for gender equality to be addressed in the project. The issue was raised at the UNDP Local Project Appraisal Committee meeting in January 2013. It was noted that "In the case of this technical project of HCFC reduction, the reality in the region is scarcity of female experts in the Refrigeration and the Air Conditioning sectors, probably due to the low rate of engagement of women in these academic and practical curricula. In this case however, several of the national counterparts in the national ozone units are women. An effort will be put in ensuring participation of women in the capacity building activities as well as during recruitment processes. The team will discuss here with the Bratislava Regional Centre Gender Practice how to add some additional points on gender as a complementary annex to the project document. There were discussions at the 2016 Project Board meeting and the Project Meeting but the annex was not available to the Mid Term Reviewer.

4.1b Results Framework

The Project Results Framework in the project document has a table populated under the following headings. The texts are not being repeated for the sake of brevity as they amount to several pages.

| Project Strategy | Objectively verifiable indicators | Baseline | Target | Sources of verification | Assumptions |
|---|---|---|---|---|---|

**S**pecificity: The indicators are clearly defined and describe what the objective is of the project strategy. The regional project indicators and the country specific project indicators are provided in detail.

**M**easurability: All the indicators are measurable and verifiable.

**A**chievability: As things stand, all the Objectives and the Outcomes described in the project document are achievable provided the National Partners, in particular the line Ministries and Environmental Protection Committees, take ownership and move forward. This does not appear to be the case for Ukraine as yet as the Ministry of Ecology and Natural Resources (MENR) appears reluctant to take on ownership of the project as yet. They do not appear to have given any thought to what they would like to see covered by the project and what their role is in the implementation. The Ministry has not had a Minister for the past 6 months or more and the two Deputy Ministers were unable until recently to come to a conclusion regarding the Memorandum of Understanding (MOU) which outlines the roles and activities of MENR and UNDP. A new Minister has been appointed as of April 14, 2016. It remains to be seen if the file will be presented to the Minister in the recent future and the MOU signed without any further demands for modifications, as has been the case in the past. In addition, there appears to be a general reluctance on the part of the MENR to have any dealings with the private sector. This could have an impact on the following:

a. Certification of technicians
b. Centre(s) for Recovery and Recycling of refrigerant – which should become a key component of the project after the project restructuring.

**R**elevance: The indicators are relevant for each of the countries to meet their commitments for HCFC phase-out, particularly without causing any economic disruption and allowing for HCFC using equipment to operate till the end of their useful life.

**T**ime Bound: The Project Result Framework does not indicate expected dates of accomplishment. The country wise individual project documents do provide timelines for each activity to be completed. It is recommended that a column be added to the Project Results Framework indicating expected date of completion of each indicator.

### 4.2 Progress Towards Results

Progress towards results is assessed based on data provided, amongst others, in the Project Document, project work plans, GEF Tracking Tools, and PIRs, as well as results verified during the MTR mission.

#### 4.2.1 GEF Tracking Tools

The GEF Tracking Tool for Phase-Out of ODS was finalised by the GEF in 2015 and the tool was not available at the time the project was approved. As part of the Mid Term Review all beneficiary countries were requested to prepare the ODS tracking tool and make it available to the consultant. This is the first time that the Tracking Tool has been completed for this project.

Tajikistan is the only country which has stated the quantities of ODS including HCFCs recycled under the Recovery and Recycling of ODS component. Belarus and Uzbekistan also have Recovery and Recycling projects and they should report the quantities of ODS including HCFCs recycled in the final Tracking Tool at project closure. The same applies to Ukraine as and when they implement a Recovery and Recycling project.

The Tracking Tool for ODS was available only in 2015 and all the Countries can be complimented on their completing most of it for the MTR Review. However, they should have noted whether the actions listed completed the activity or what of the activity still remained to be completed.

#### 4.2.2 Progress Towards Outcome Analysis

The Full Sized Project consists of a regional project component and four national project components with a large number of indicators which, if fully reproduced, will make this report rather unwieldy. The Reviewer has taken the liberty of summarizing the texts under each of the columns in the Table attached at Annex 1 with only the salient points mentioned. In addition, there are quite a few repetitions and entries which do not fit the baseline description and should have been placed appropriately. For the full text the table should be read along with the 2nd PIR submitted.

For every GEF-financed full size project, the 3rd PIR, the MTR report, and the corresponding GEF Tracking Tool must be submitted to GEF Secretariat in the same calendar year. While no Mid Term Target date had been set, it could be attributed to the fact that there was an initial delay while waiting for all countries to appoint the Project Managers.

In general, the ratings are Highly Satisfactory or Satisfactory and the outcomes are expected to meet their intended targets.

The regional components of the project are proceeding quite satisfactorily and it is expected that the resources will be deployed well in time for them to have an impact at the national level.

Belarus has practically completed the national component of the project with follow-ups and finalisations required to close the project. Tajikistan and Uzbekistan's implementation of national components are proceeding well and are on track to complete their activities before the project ends.

The main concern is with Ukraine. The Ministry of Ecology and Natural Resources (MENR) is the senior beneficiary of the Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region. However, despite continuous interaction and dialogue initiated by the UNDP Project office, there are several issues that remained unresolved.

1. MENR appears reluctant to take on ownership of the project. They do not appear to have given any thought to what they would like to see covered by the project and what their role is in the implementation.
2. MENR is insistent that until an MOU is signed with UNDP, they are unable to formally start any activity on the project.
3. There have been several rotations of Ministers and Deputies over the past 9 years and the Ministry has not had a Minister for the past 6 months or more and the two Deputy Ministers were unable to come to a conclusion regarding the MOU. A new Minister has been appointed as on April 14, 2016. It remains to be seen if the file will be presented to the Minister in the recent future and the MOU signed without any further demands for modifications, as has been the case in the past.
4. There appears to be a general reluctance on the part of the MENR to have any dealings with the private sector. This could have an impact on the following:
    a. Certification of technicians
    b. Centre(s) for Recovery and Recycling of refrigerant – should become a key component of the project after the project restructuring.

### 4.2.3 Project Implementation and Adaptive Management

4.2.3a Management Arrangements

See 3.6 above for description of the project implementation management set-up. The project has a regional component and 4 national components. At the regional level there is a Project Board headed by the UNDP Istanbul regional hub (IRH) Manager and includes the Senior Supplier – Montreal Protocol and Chemicals Unit IRH; Senior Beneficiaries - Representatives from the Governments and UNDP Country Offices of the 4 participating countries (Belarus, Tajikistan, Ukraine, Uzbekistan); and Project Manager(s): from the regional component and 4 national components of the overall GEF project.

At the national level, project implementation is guided by the Project Board. The Project Board is responsible for making consensus-based management decisions for the project when guidance is required by the Project Manager, including recommendation for approval of project revisions. Project reviews by this group are made at designated decision points during the running of a project, or as necessary when raised by the Project Manager. This group is consulted by the Project Manager for decisions when tolerances (i.e. constraints normally in terms of time and budget) have been exceeded.

There have been delays in recruiting Project Managers both at regional and national levels and this has impacted the implementation of the projects. However, all Project Managers are currently on board and fully involved with the project implementation.

The current management structure at regional and national levels are as per the arrangements laid out in the Project Document and it has been functioning well with no changes needed. The responsibilities and reporting lines are clear. Decision making appears to be transparent and timely.

The regional component of the project is being implemented under DIM (Direct Implementation Modality) by UNDP's Istanbul Regional Hub (IRH). UNDP IRH is focused on results and the Project Manager is in regular contact with his counterparts at the national level. When necessary, adequate

guidance on issues has been provided by the regional team to their national counterparts. The status of the projects at regional and national levels are adequately reported with issues requiring action clearly noted. Where required, issues are discussed and resolved at the annual project board meetings. With delays in appointing project managers in some of the countries, project startup was delayed, impacting on the regional components also. Specifically, delays in Ukraine (beyond UNDP control) and Uzbekistan (currently under an expedited implementation plan), resulted in uneven progress in all countries which also had an effect on the regional component. This has resulted in requesting for project extension and getting approval from UNDP GEF from March 2016 to July 2018. This is expected to allow completion of the majority of planned activities (counted with the most delayed project in Uzbekistan). No environmental and social issues were identified in the UNDP Environmental and Social Screening checklist and the GEF technical assessment of the project is "consistent" with other similar projects.

At the national level, all UNDP Country Office management appears to be focused on results, although there is some pressure on the Project Manager(s) on financial delivery in some countries. All procurement is done as per UNDP rules but there appears to be some delays in completing procurement exercises in some countries.

Belarus and Uzbekistan projects are being implemented under NIM (National Implementation Modality). In Belarus the Ministry of Natural Resources and Environment Protection (MNREP) is the Implementing Partner. The government through MNREP has shown full ownership of the project which can be seen from the fact that 81% of the total budget has been spent as of March 2016 (including obligation/commitments).

In Uzbekistan SCNP (State Committee for Nature Protection) is the Implementing Partner. While the National Project Coordinator from SCNP was appointed in July 2013, the UNDP Project Manager was only appointed in August 2014, after several unsuccessful attempts at recruitment. During the period of unavailability of the Project Manager, project implementation was managed by the staff of the Environment and Energy Unit (EEU) in UNDP's Country Office. Lack of Project Manager affected the progress in project implementation during its inception phase. After the Project Manager's appointment, the project has been progressing smoothly with full direction from the implementing partner and support from UNDP. During the inception period, risks indicated in Project Document have been monitored and updated. The Project Manager reviews and updates the risk log annually and there has been no cause for concern till now. Annual reports from the Project Manager are presented to the Project Board and on approval is forwarded to the Project Manager at IRH for inclusion in the reporting on the Regional Project. The project has spent about 36.4% of their total budget as of March 2016.

Tajikistan and Ukraine projects are being implemented under DIM (Direct Implementation Modality) with UNDP Country Offices as the Implementing Partners. In Tajikistan, the Senior Beneficiary is Committee for Environmental Protection (CEP) under the Government of Tajikistan. The project has been progressing very well and the CEP has been active and supportive in the implementation of the project. This can be deduced from the fact that 79% of the total budget has been spent till date.

The Ukraine project continues to face political instability with institutional changes. The Ministry of Ecology and Natural Resources (MENR) as the Senior Beneficiary appears reluctant to take on ownership of the project. They do not appear to have given any thought to what they would like to see covered by the project and what their role is in the implementation, despite continuous interaction and dialogue initiated by UNDP Project office. The State Fiscal Service (which is primarily Customs Service for this project) is a willing partner and an MOU has been signed with them. Equipment for refrigerant identification, including gas chromatographs and refrigerant identification equipment have already been delivered. MENR officials suggested at the meeting with the MTR reviewer that UNDP sign a MOU with the State Ecological Academy to start the ground work related to training of Customs, Ecological

Inspectors and Refrigeration Technicians. Since the Academy is under the MENR, UNDP has to evaluate whether an MOU can be signed with the Academy without MENR's formal approval. The State Ecological Academy of the MENR is keen and enthusiastic in setting up the training program and cooperating with the project, which may offer a solution. The conversion project at the private sector foam system house, Polyfoam, appears to be going on schedule. It is recommended that the Senior UNDP Country Office management meet with the newly appointed Minister to ensure the project is formally adopted by the Ministry and finalise Ukraine's National HCFC Phase-Out Strategy at the earliest. Without this there is a high risk of the project not being completed.

4.2.3b. Work Planning

Issues related to delays in project start up and implementation and their resolution have been discussed in "Management Arrangements" above.

Work Planning processes are guided by the project document and timelines identified and appear to be results-based, with the exception of Ukraine.

The results framework for the regional and national projects is extremely detailed and is a useful management tool to follow the progress of each of the activities, particularly when the results of the Project Implementation Review for each year is included. This allows for progress (or any lack thereof) to be noted for each activity and for any changes made to the basic design since the project started. This can be particularly seen in the case of Ukraine.

4.2.3c. Finance and Co-Finance

The finances for the projects at regional and national levels are managed by UNDP on their ATLAS Management and Financial system. Each project office has access to ATLAS and MPU/Chemicals at IRH has an Administrative and Operations Consultant who maintains an overview of the overall project finances.

Regional Project

For the regional project, UNDP doesn't conduct an annual audit of the project but it is expected to have one audit during project duration.

6 budget revisions have been made, following GEF rules, to adopt changes in project deliveries. The Revisions and their descriptions are as follows:

BudRev1 (Oct 2013) – Reallocation of funds to future years to meet the project delivery targets.
BudRev2 (Nov 2013) – Increase of 2013 budget to cover Workshop costs.
BudRev3 (Sep 2014) – This budget revision reflects the allocation of funds from 2014 to 2015 in the project, to take into account re-phasal of activities and delivery targets.
BudRev4 (Dec 2014) – This budget revision reflects the allocation of funds from 2014 to 2015 in order to take into account re-phasal of activities and delivery targets.
BudRev5 (July 2015) – Adoption of new 2015-2017 budget at Project Board Meeting.
BudRev6 (Dec 2015) – Adoption of 2015-2018 budget in view of project extension.

UNEP could be considered as in kind co-financing partner in this project due to their contribution to many project activities.

**National Projects**

Belarus

The main variances between planned and actual expenses are due to reallocation of money from Activity 2.5 (ODS destruction) to Activity 2.4 (Upgrades of HCFC re-use system) and Activity 2.3 (Natural cooling pilots) following the decision of the Project Steering Board No. 5 on 25.05.2015. The Board took the decision not to proceed with the ODS Destruction project and decided to reallocate the funds as described above. The reasons behind this decision are as follows:

1) Proposed equipment (Asada Plasm X) does not ensure the destruction of R-11, halons 2402 and 1211 as well as mixtures.
2) Proposed equipment does not meet the environmental requirements of Belarus legislation. According to the data provided by manufacturers, hydrogen chloride concentration is 10 times more of the allowable emission standard in accordance with legislation of Belarus
3) Economic inexpediency: ODS destruction costs are about 25 $/per kg. ODS owners are not willing to pay such a big amount for utilization, and there is also a lack of money in local budgets at the moment in Belarus due to the current economic situation.

A National assessment of project performance (multi-discipline review for project of technical assistance with the participation of representatives of Ministry of Economy, Ministry of Taxes, Ministry of Foreign Affairs) was held in May 2015 and the project performance was assessed as satisfactory. No other audits are planned.

Tajikistan

There does not appear to be any variances between planned and actual expenses. Delivery is proceeding on all planned activities. The only activity which has not yet started is the Pilot retrofit/replacement incentive program. The proposed projects for this activity are not yet finalised. The initial project proposal in the project document was for the conversion of HCFC-based equipment to HFC-based system. With interest in moving to low-GWP natural refrigerants, studies have to be done to take decisions on what approach to take within the funding available. The regional component of the project has also been requested for additional funds. The project may consider retrofit of one system to Ammonia or even consider setting-up training facilities for $CO_2$ refrigeration.

Ukraine

The approved project contained a PU foam conversion project at Intertehnica, an XPS foam conversion at Sobraniye, solvent phase-out at Nord and Blending operation conversion at Polyfoam. The overall difficult situation in Ukraine which emerged in 2014 and 2015 entailed a political crisis that triggered constant changes of top officials in the state authorities. Warfare in the East of Ukraine eliminated any possibility of investment in enterprises in Donetsk. That means that 71% of the initially planned investments turned out to be impossible to implement. In addition, for 14 months UNDP had no mechanisms to carry out investments in the private sector. Out of the four enterprises included in the project, only Polyfoam stayed to carry out a transition to ozone-friendly technologies. The economic crisis and the national currency devaluation resulted in bankruptcy of enterprises including those planned for investment within the project.

At the first Project Board Meeting of Ukraine on October 9, 2015, the above was noted and it was proposed to revise the budget allocated to the outcome “Targeted Investment and Demonstration Projects for the HCFC Phase Out” in the Project Component “HCFCs, strengthening capacity at the national level

and investment into activities for the HCFC phase out" in favor of the RAC (refrigeration and air-conditioning equipment) servicing sector as well as the needs of the State Fiscal Service of Ukraine and Ministry of Ecology and Natural Resources of Ukraine and assistance with legislation development.

Uzbekistan

HCFC project is and will be audited as a part of UNDP internal audit. The last audit was carried out in 2015.

7 budget revisions have been made while following GEF rules, in order to adopt changes in project deliveries. Revisions and their descriptions are as following:

BudRev A (Aug 2013) – This budget revision is prepared in order to launch the project and approve project budget for year 2013
BudRev B (Dec 2013) – This budget revision reflects the allocation of funds from 2013 to 2014 in order to take into account re-phrasal of activities and delivery targets.
BudRev C (Oct 2014) – This budget revision reflects the allocation of funds from 2014 to 2015 and 2016 in order to take into account re-phrasal of activities and delivery targets.
BudRev D (Dec 2014) – This budget revision reflects the allocation of funds from 2014 to 2015 and 2016 in order to take into account re-phrasal of activities and delivery targets.
BudRev E (Dec 2014) – This budget revision reflects the allocation of funds from 2014 to 2015 and 2016 in order to take into account re-phrasal of activities and delivery targets.
BudRev F (Dec 2015) – This budget revision reflects the allocation of funds from 2015 to 2016 in order to take into account re-phrasal of activities and delivery targets.
BudRev G (Feb 2016) – Adoption of 2016-2018 budget in view of project extension.

Regarding the ODS Pilot Destruction project: based on the Chinese experience and results of economic analysis of cost-effectiveness of the equipment, it was decided to procure small-scale/mobile ODS destruction unit, preferably "Plasma X". However, the manufacturer of "Plasma X", ASADA Corp, very recently informed about discontinuing small-scale/mobile ODS destruction units with no resuming plans. Other manufacturers of plasma type ODS-destruction equipment proposed prices at least four-five times greater than the project allocated budget amount. Thus, implementation of the project activities on pilot destruction of obsolete ODS was delayed and project strategy on ODS destruction might be changed due to absence of proper ODS destruction equipment and technologies which can be procured within the planned project budget for piloting destruction of obsolete ODS. The project is developing a report with all possible further actions regarding obsolete ODS management in Uzbekistan, which will be reviewed by the Project Board during its next meeting in September-October 2016. Delivery is otherwise proceeding on all planned activities.

**Table 7: Overall Budget vs Expenditure**
**(as of end March 2016)**

| | Regional | Belarus | Tajikistan | Ukraine | Uzbekistan |
|---|---|---|---|---|---|
| Budget | $1,080,000 | $2,200,000 | $1,100,000 | $3,190,000 | $1,430,000 |
| Expenditure | $294,985 | $1,782,407 | $871,965 | $647,446 | $520,813 |
| % Spent | 27.31% | 81.02% | 79.27% | 20.30% | 36.42% |

(Data provide by Livia Buzova UNDP IRH)

Co-Financing:

All national projects have substantial co-financing components, both in kind as well as cash (for investment projects). The details by country are presented as follows:

Belarus

**Table 8: Belarus Co-Financing**

| . **Sources of Co-financing** | **Name of Co-financer** | **Type of Co-financing** | **Amount Confirmed at CEO endorsement (US$)** | **Actual Amount Contributed at stage of Midterm Review (US$)** | **Actual % of Expected Amount** |
|---|---|---|---|---|---|
| National Government | Ministry of Natural Resources and Environmental Protection of the Republic of Belarus (MNREP) | in-kind | 550,000 | 710,000 | 129% |
| National Government | State Customs Committee of the Republic of Belarus (SCC) | cash | 500,000 | 12 236* | 2% |
| **National Government** | **TOTAL:** | | **1 050,000** | **722, 236** | **70%** |
| other | LLC "MAZ-Kupava" | cash | 2 715,000 | 1, 600,000 | 59% |
| other | David-Gorodoksky Electromechanical Plant | cash | 700,000 | 135,000 | 19% |
| other | Belarusian National Technical University | in-kind | 300,000 | 280,000 | 93% |
| Non-Governmental organization | Association of the enterprises of microclimate and cold industry (APIMH) | in-kind cash | 750,000 | 520,000 | 69% |
| Private Sector | ZAO "Holodon" | in-kind cash | 450,000 | 540,000 | 120% |
| Private Sector | Unitary Enterprise "Laminar" | in-kind cash | 450,000 | 285,000 | 63% |
| Private Sector | OOO "Hladagent-Service" | in-kind cash | 300,000 | 390,000 | 130% |
| Private Sector | PI «RU Cool System» | in-kind cash | 0 | 207,400 | |
| Private Sector | PI "Agropromholod" | in-kind cash | 180,000 | The company is no longer exist. | |
| Private sector | JV "Santa Bremour" | in-kind cash | 0 | 279,000 | |
| Private Sector | LLC "MiasoMolMontazh" | in-kind cash | 0 | 153,000 | |
| **OTHER, TOTAL** | | | **5 845,000** | **4 389,400** | **75 %** |

Tajikistan

**Table 9: Tajikistan Co-Financing**

| Sources of Co-financing | Name of Co-financer | Type of Co-financing | Amount Confirmed at CEO endorsement (US$) | Actual Amount Contributed at stage of Midterm Review (US$) | Actual % of Expected Amount |
|---|---|---|---|---|---|
| Private Sector | **CSC Babilon -M** | In-Kind | **$500,000** | **$450,575.38** | **90%** |
| Private Sector | **CSC TT Mobile** | In-Kind | **$300,000** | **$268,137.69** | **89%** |
| Private Sector | **CSC T-Cell** | In-Kind | **$350,000.00** | **$314,136.85** | **90%** |
| Private Sector | **LLC Tamiri Yahdon** | In-Kind | | **$78,660.00** | |
| Private Sector | **LLC Vostok** | In-Kind | **$70,000.00** | **$130,545.00** | **186%** |
| Private Sector | **LLC Ekaud** | In-Kind | **$450,000.00** | **$207,157.50** | **46%** |
| Private Sector | **LLC Rembittehnika Khujand** | In-Kind | **$250,000.00** | **$104,276.25** | **42%** |
| Civil Society Organization | **RAC Tajikistan** | In-Kind | **$730,000.00** | **$220,387.50** | **30%** |
| National Government | **Customs Service** | In-Kind | **$700,000.00** | **$453,622.50** | **65%** |
| National Government | **Committee for Environmental Protection** | In-Kind | **$250,000.00** | **$134,325.00** | **54%** |
| National Government | **Engineering College** | In-Kind | | **$194,310.00** | |
| **TOTAL** | | | **$3,350,000** | **$2,556,134** | **76%** |

Ukraine

The data from Ukraine is not yet available.

Uzbekistan

**Table 11: Uzbekistan Co-Financing**

| Sources of Co-financing | Name of Co-financer | Type of Co-financing | Amount Confirmed at CEO endorsement (US$) | *Actual Amount Contributed at stage of Midterm Review (US$) | Actual % of Expected Amount |
|---|---|---|---|---|---|
| Private sector | PE "Panchenko I.A." | In-Kind | **350,000** | | |
| Private sector | PE "Hladmontaj" | In-Kind | **350,000** | | |
| Private sector | PE "Shomur" | In-Kind | **350,000** | | |
| Private sector | LLC "Holod Sistem Servis" | In-Kind | **350,000** | | |
| Private sector | LLC "AZN" | In-Kind | **350,000** | | |
| Private sector | LLC "Baxt - Nazir" | In-Kind | **200,000** | | |
| Private sector | LLC "Meat Import" | In-Kind | **200,000** | | |
| Private | Joint-stock company "Yo'lreftrans" | In-Kind | **500,000** | | |
| Government | State Committee for Nature Protection | In-Kind | **750,000** | | |
| Government | State Committee for Nature Protection | In-Kind | **1,250,000** | | |
| Government | Tashkent State Technical University | In-Kind | **50,000** | | |
| Government | Republican Research Centre of Emergency Medicine | In-Kind | **100,000** | | |
| | | In-Cash | **100,000** | | |
| **TOTAL:** | | | **USD 4,900,000** | | |

Note: At this stage project has not calculated Actual Amount Contributed by co-financers. This exercise will be implemented when beneficiaries will receive equipment and tools within the project and joint activities started

4.2.3d. Project Level Monitoring and Evaluation Systems

The detailed Monitoring and Evaluation work plans and budgets are described in the project document(s). As per UNDP/GEF Rules, quarterly progress monitoring matrixes and semi-annual reports are prepared and submitted to UNDP and respective National Project Partners. Visits to project sites to assess first hand project progress are also done as per the Annual Work Plan.

The Project Results Framework in the project document clearly defines the verifiable indicators, baseline, target and sources of verification for each Objective/Outcome. These are valuable tools providing all the necessary information and are used for monitoring and for evaluation activities. The Reviewer does not believe that any additional tools are required for monitoring.

The monitoring and evaluation activities are part of the Project Management activities and no separate budget has been allocated for monitoring and evaluation, except where international consultants are to be recruited for carrying out independent Mid Term Review and Final Evaluation.

4.2.3e. Stakeholder Engagement

For effective and timely implementation of the project, particularly at national level, Government and other direct and tangential stakeholders have to be active partners. In all four countries, the Government ministry/department related to environment is the main stakeholder along with others such as Customs, Ministry of Education, and the beneficiaries of the project. In Belarus and Uzbekistan, the projects are being implemented by the National Partner and the projects are advancing well indicating full participation by the stakeholders. In Tajikistan, the Committee on Environment Protection established an Inter-Ministerial Task Force creating a platform for consultation with all stakeholders. Unfortunately, this has not been the case in Ukraine as yet where political instability continues and UNDP has not yet been able to sign the all-important MOU with the Ministry of Ecology and Natural Resources which is the Senior Beneficiary of the project.

Good awareness has been created about HCFC phase-out issues with stakeholders and those impacted by the phase-out. During visits to the projects in Belarus, Tajikistan and Uzbekistan it was very clear that there has been active consultation and participation of all the beneficiaries both at government and private sector levels and there is full ownership. In Ukraine, partnerships have been developed with the State Fiscal Body (Customs) and work is progressing. It is also expected that collaboration and partnership with The State Ecological Academy of the MENR will be developed shortly.

4.2.3f. Reporting

Annual Progress Reports are prepared by the regional and national projects and presented to the Project Boards. Key project partners are also invited to attend these meetings. A key part of the reports is Risks and Issues and Implementation Challenges. The status of the risks identified in the project are discussed and changes are noted. Till date, Belarus, Tajikistan and Uzbekistan have all reported that the risks are reducing. With the projects progressing well there has been no need for any adaptive management changes.

Two PIRs have been submitted so far and the reviewer is not aware of any adverse comments about them. The Project Managers at national level, in consultation with the project partners complete their GEF reporting requirements and the Project Manager at the regional center consolidates the report(s) as required by the GEF. The PIRs are extremely detailed and could do with some reduction of repetition, although it should be mentioned it is based on the Project Results Framework in the approved Project Document.

4.2.3g. Communications

The internal language of communication between project management and stakeholders is Russian, both written and oral, with communications in local languages when required. Reports that have to be submitted to UNDP and GEF, as well as the annual reports are also available in English. The Project Managers are in close contact with their partners and stakeholders and when communications are received they are responded to, or discussed with the government and responded to.

The projects have a web presence in all countries except Ukraine. The UNDP Country Office websites have short descriptions of the national project and the expected outcome. However, there does not seem to be much updating of the project progress in these pages.

The refrigeration association in Belarus has a website with information and activities on the website. In Tajikistan the project has assisted to develop websites for the National Ozone Committee, Refrigeration Association and Engineering - Pedagogical College.

In addition to the above, the countries celebrate the annual Ozone day; publish information material focused on specific stakeholders and involve journalists in awareness activities.

There are specific sustainable development and global environmental benefits that are being derived from the project.

- Compliance with Montreal Protocol requirements: All countries are reporting reduced consumption of HCFCs and are within their control limits.
- Strengthened Institutional capacities: Except for Ukraine, key national partners have and continue to take HCFC phase-out approaches and exercise effective regulatory controls over the end use and import of HCFCs and HCFC-based equipment. This is being done through improvements in the current legislation as well as through building capacities of environmental inspectors to monitor and control HCFC end use and of Customs to detect HCFCs/blends/equipment at the entry points and enforce regulatory measures as required by the law.
- Enhanced knowledge base: An enhanced knowledge base is developing 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.
- Technology conversions: Technological conversions are ongoing in the manufacturing sector with selection of zero-ODP and low-GWP technologies where possible.
- Recovery/Recycling/Reclaim infrastructure: Except for Ukraine, projects have been implemented to develop and strengthen the HCFC re-use scheme to minimize the need for HCFC import and reduce HCFC emissions into the atmosphere.
- ODS waste storage: ODS waste storage are being established in conjunction with the recovery/recycling projects or independently to store unwanted and unrecognizable blends of ODS.
- ODS destruction project: The ODS Pilot Destruction project in Uzbekistan has been cancelled since the company manufacturing the small Plasma Arc Destruction unit has decided to discontinue the product. Belarus took the decision not to proceed with it based on economic and practical considerations.
- Climate Change benefits: Alternative technologies retrofits/replacement (and natural cooling technologies) in the refrigeration and A/C sectors, being implemented and planned, will lead to lower HCFC emissions and energy-savings.
- Awareness: The project has created awareness amongst policy makers, stakeholders and the public on the need for HCFC phase-out.

### 4.2.4 Sustainability

The following provides an overall risk matrix that identifies specific risks identified.

**Table 12: Risk Matrix**

<table>
<tr><th>BELARUS</th><th>TAJIKISTAN</th><th>UZBEKISTAN</th><th>UKRAINE</th></tr>
<tr><td colspan="4">Government or private/public co-financing commitments do not materialize due to diversion of funding and allocation of staff elsewhere</td></tr>
<tr><td colspan="4">Delays in adopting HCFC phase-out strategy that delays or reduce the effectiveness of other activities related to HCFC phase-out</td></tr>
<tr><td colspan="3">HCFC phase-out is delayed and country is not in compliance with Montreal Protocol in 2015</td><td>Country remains in non-compliance with 2010-2014 HCFC reduction milestones</td></tr>
<tr><td colspan="3">Catalytic effect of demonstrating low GWP technologies is limited due to high cost of new refrigerated equipment</td><td>-</td></tr>
<tr><td>Unwanted ODS quantities are insufficient to fully demonstrate pilot ODS destruction and its benefits for a complete cycle of ODS re-use</td><td>-</td><td>Unwanted ODS quantities are insufficient to fully demonstrate pilot ODS destruction and its benefits for a complete cycle of ODS re-use</td><td>-</td></tr>
</table>

The principal issue in achieving and sustaining compliance with accelerated HCFC phase-out in the subject CEIT countries is curtailment of the continued rapid growth in HCFC consumption in the region, particularly that associated with refrigeration servicing, and to start a long-term process of reversing it. This requires immediate action in laying the institutional and regulatory groundwork, and formalizing national commitments and action plans entrenched in national policy, building institutional and technical capacity, and undertaking targeted investment in converting direct sources of consumption and in the refrigeration servicing and refrigerant management infrastructure.

In the case of Belarus, Tajikistan and Uzbekistan the risks are considered to be reduced since all the risk factor are being continuously addressed and are being overcome. That is however, not the case for Ukraine. Ukraine may not be in non-compliance because of market forces prevailing, but delays in adopting a phase-out strategy will make it unable to start several activities related to the HCFC phase-out such as training of technicians, refrigerant recovery and recycling, demonstration/pilot projects in retrofits to non-ODS technologies etc.

4.2.4a. Financial Risks to Sustainability

Financial and economic resources that will be required to sustain the project outcomes are as follows:

- Ongoing training of customs officials and environment inspectors have a low risk of being impacted if financial resources are not available, since the training programs are being incorporated into their regular training programs of the national institutions.
- The state of technology, particularly in the field of refrigeration and air-conditioning is in a state of flux with new technologies becoming commercially viable. This will require upgrading of Trainers' skills to be able to train the technicians; training tools and materials relevant to the new technologies; servicing tools etc. Continued training of refrigeration technicians has a high risk of being impacted unless plans are put in place for recovery of costs from trainees and training institutions pay their instructors. In addition, training institutions need to be able to finance the costs of new training material.

4.2.4b. Socio-economic Risks to Sustainability

There are political risks that may jeopardize sustainability of project outcomes specifically in Ukraine as stakeholder ownership at the Government level is as yet to be demonstrated. In the other countries the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained is low as long as the focal point, the National Ozone Unit or equivalent, is funded and supported by the Government. Amongst the stakeholders that are directly impacted by the HCFC phase-out (importers of RAC equipment and service sector) there is a strong interest that the project benefits continue to flow as it has direct impact on their economic situation. The projects have all undertaken demonstration and pilot projects which are ongoing. Once they are completed, the projects intend to share the results and knowledge both nationally as well as with other project partners. The knowledge and lessons learned will also be disseminated through participation in regional meeting arranged by UNEP.

4.2.4c. Institutional Framework and Governance Risks to Sustainability

The legal frameworks, policies, governance structures and processes pose risks that may jeopardize sustenance of project benefits in Ukraine. In all other countries this risk is low as the systems/mechanisms for accountability, transparency and technical knowledge transfer are in place or being put in place. Stakeholders are willing and cooperating partners in the projects and will try to ensure that the systems are in place for getting long-term project benefits even after the project is complete.

4.2.4d. Environmental Risks to Sustainability

The overall risk rating attached to the project is considered small recognizing previous and current state of the countries' response to implementation of the Montreal Protocol. Climate change risks are associated with the project in part related to the substitution of HCFCs with high-GWP HFCs (at YO/Reftrans in Uzbekistan) though the project addresses these risks from the side of substantially improving equipment servicing techniques, and thus avoiding emissions. The problem is that retrofit to R-134a is the only option, given the equipment that is in use. Further, the project is also demonstrating, on a limited basis, non-ODS/low-GWP (such as ammonia, hydrocarbons, carbon dioxide) technologies in refrigerated equipment. This also has an additional balancing effect in showcasing more energy efficient equipment. Finally, in the manufacturing sector, the current use of HCFCs has been/is being substituted with non-ODS/low-GWP technologies.

## 5. Conclusions and Recommendations

### 5.1 Conclusions

The conclusions are integrated into the body of the report at relevant location. Detailed conclusions can be found in the "Justification for Rating" column of the attached Progress Towards Outcome Analysis at Annex 1.

## 5.2 Recommendations

General

1. The UNEP documents to be translated into Russian should be identified and work started as soon as possible, particularly the resources for RAC technical documents.
2. In Uzbekistan and Ukraine, UNDP and government need to come to some arrangement on how grant equipment procured under the project can be transferred without any financial repercussions to the beneficiaries.
3. Sustainability of training of technicians can become an issue once the project is over. The training institutions should develop and put in place plans to recover costs from future trainees.
4. In Tajikistan and Uzbekistan (if ODS destruction project funds are to be used for Demonstration projects), where the pilot retrofit/replacement incentive program studies are to be started the approach to take within the funding available should be completed quickly and some project(s) initiated.

Customs

5. Countries may want to consider discussing with Customs about ODS import documents being approved by NOU/responsible body of environment before Customs releases consignment. The data from each transaction can be entered into a database maintained by the environment body and reviewed regularly to see how a company is performing vis a vis it's annual quota.

Legislation/Regulations

6. Following Legislation/Regulations should be considered to be put in place:

    a. Countries should consider bans on import of single use cylinders. In Belarus, legislation has been put in place to ban import of single use cylinders and it has come into effect from January 2016. A follow up should be maintained to ensure that importers are aware that their purchase orders for refrigerant include this requirement, particularly from Chinese suppliers.
    b. All countries should implement a ban on equipment containing or working on ODS at the earliest possible to reduce the service tail for HCFCs.
    c. Current regulations address ODS only when issuing operating licenses to companies. The regulation should be amended to include all refrigerants, since hydrocarbons, ammonia and other flammable refrigerants will/are coming into the market.
    d. Regulations related to waste from production and use should be amended to include End of Life (EOL) equipment.

Follow Up

7. All countries are facing problems importing HCFC standards for their gas analysers. It is believed that Turkey has been able to develop a methodology for import of these standards. The information should be obtained and disseminated to all the partner countries.
8. In Belarus, close follow up should be maintained with MAZ-Kupava, the company which is implementing a foam project, to ensure that payments are made to the equipment supplier on time and the equipment is installed and commissioned before the end of the year.

9. The demonstration projects in all countries should be followed till completion and documentation made of the technical issues and resolutions and lessons learnt for wider dissemination nationally and with other countries in the region.
10. Maintain a follow up on the Recovery/Recycling centers to find out how they are operating and have them report on the quantities recovered and recycled on a quarterly/half yearly basis.

**Annex 1**

## Progress Towards Outcome Analysis

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
|---|---|---|---|---|---|---|---|
| **Objective: To achieve compliance with the accelerated Montreal Protocol HCFC phase-out requirements through stabilization and progressive reduction of HCFC consumption.** | To avoid repetition, see details at Outcome 1a, 1b, 1c, 1d and Outcome 2 below. | To avoid repetition, see details at Outcome 1a, 1b, 1c, 1d and Outcome 2 below | All countries in compliance till date. Ukraine continues to implement specific plan of action to be followed to maintain compliance, which is also regularly reviewed by the Implementation Committee for the Montreal Protocol. All countries on track to meet 2015 target of 90% reduction of HCFC consumption compared to their baseline. Ukraine reported decreasing HCFC imports trends which may help stay in compliance with 2015 targets - this reporting will be released only in Q3 2016. | To avoid repetition, see details at Outcome 1a, 1b, 1c, 1d and Outcome 2 below | To avoid repetition, see details at Outcome 1a, 1b, 1c, 1d and Outcome 2 below | To avoid repetition, see details at Outcome 1a, 1b, 1c, 1d and Outcome 2 below | To avoid repetition, see details at Outcome 1a, 1b, 1c, 1d and Outcome 2 below |
| Outcome 1: Regional accelerated phase-out capacity building (all countries) | | | | | | | |
| **Outcome 1 (a): Legislative and Policy Options for HCFC phase-out and control** | • Russian language resource materials on HCFC control options prepared<br>• Awareness training for decision-makers | • Key stakeholders generally have limited awareness of the issue or actions required on the higher or technical level to address HCFC phase-out; | Relevant UNEP reference materials on Legislation and Policy Options for HCFC phase-out reviewed and adapted to the needs of the countries. Reviewed texts are to be translated. Awareness-raising of | • Availability of key guidance documentation in Russian, or local languages, where required, on HCFC control options, Customs enforcement approaches and methodologies, | | HS | Activities on the regional component are closed for this Outcome.<br>- All 4 participating countries are in compliance with the Montreal Protocol.<br>- One country (Ukraine) has a specific plan of action to be followed to maintain |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
|---|---|---|---|---|---|---|---|
| | on legislative and regulatory actions accomplished<br>• Regional networking on the country with Art 5 and other non-Art 5 countries in the region is supported | • Decision-makers from enforcement department (Environment Protection, Customs) have limited knowledge and lack practical skills on the regulatory approaches to effectively control HCFC related challenges;<br>• Limited number or lack of trained trainers on enforcement and best refrigeration aspects;<br>• 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;<br>• Regional networking with other partner | policymakers conducted through targeted missions of international consultant on HCFC legislation.<br>Following regional level training of trainers for Customs held in 2014 in Sarajevo, national level trainings were supported in Belarus (400 officers) and Tajikistan (40 officers). Uzbekistan requested additional Customs training in-country which planned for September 2015. A bilateral mission was planned from Customs-Ukraine to Customs-Belarus to exchange experience, and design support to Customs-Ukraine.<br>Regional networking continued through participating countries attending UNEP-organized meetings for Ozone Officers from the region. | refrigeration sector capacity building, energy-efficiency, ODS destruction etc.;<br>• High-level decision-makers of Environment Protection, Customs, territorial inspectorates, other Governmental agencies such as Ministry of Education, Standardization Committee are well informed and support the objectives of HCFC consumption phase-out and measures to address this process;<br>• 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<br>• 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 | | | compliance - regularly reviewed by the Implementation Committee for the Montreal Protocol.<br>- Tajikistan amended the HCFC legislation, taking into account of analysis and suggestions provided by the international consultant recruited by the project.<br>- Joint Regional Training of Trainers for fourteen (14) refrigeration technician specialists from all four participating countries was successfully completed with all participants receiving EU certification in September 2015.<br>Regional networking with non-Art 5 and other Art 5 countries established essential experience exchange on important HCFC phase-out related topics reinitiated. |
| **Outcome 1 (b): Capacity Building for Enforcement of HCFC control measures by customs and environmental/technical inspection authorities** | • Russian language resource documentation<br>• Awareness raising activities<br>• Training of Trainers<br>• PIC Network<br>• Regional networking | | | | | HS | - UNEP's customs training manual has been translated into Russian in coordination with Tajikistan component and UNEP Armenia.<br>- Additional documents to be translated?<br>- Awareness raising activities undertaken by international consultant.<br>- Training of Trainers for Customs completed.<br>- Formal PIC network not yet in place. Further support needed.<br>- Participation in UNEP |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
|---|---|---|---|---|---|---|---|
| | | countries in the region is lacking which prevents information and experience exchange [see topics above];<br>• Cooperation between non-Art 5 countries on effective action standards is minimal or absent. | | | | | organized Regional Network meetings assured. |
| **Outcome 1 (c): Capacity Building for the Refrigeration Sector, Incorporation of Energy-Efficiency and GHG reduction elements** | • Preparation of Russian language training manuals and information materials<br>• ToT on Best Refrigeration Practices | | | | | HS | - Fourteen refrigeration technician specialists from all four participating countries successfully completed training at Galileo Italy with all participants receiving EU certification.<br>- 2 separate trainings on natural refrigerants: Hydrocarbon and Ammonia & CO2 with follow-up missions by a safety standards expert.<br>- Identified UNEP resources for RAC technical documents to be translated into Russian. |
| **Outcome 1 (d): Support for the development of regional institutions, capacity, and cooperation** | • Preparation of Russian language information materials<br>• Promotion of Information exchange mechanisms<br>• Facilitation of regional dialogue | | | | | HS | - National delegations were sponsored by the regional component to participate in UNEP organized network meetings and thematic meetings. |
| Outcome 2: National level phase-out capacity building (all countries) | | | | | | | |
| **Outcome 2: HPMP, National Level Capacity Strengthening and HCFC Phase Out Investment** | Formal HCFC Phase-out strategy and action plan developed and endorsed | • No formal HCFC strategy is adopted and enforced through regulatory measures<br>• Inter-agency coordination to address HCFC phase-out is limited<br>• No updated HCFC | Belarus: HCFC Phase-out Strategy document approved by the Council of Ministers. Ozone Layer Law's new edition is adopted.<br>Tajikistan: Draft HCFC phase-out strategy and legislation including import/export controls | • HCFC phase-out strategy fully formulated, packaged as draft legislation for Government approval and cleared by line Ministries/departments for final endorsement<br>• Widely accessible information on HCFC | | HS for Belarus, Tajikistan, Uzbekistan.<br>S For Ukraine | - Belarus, Tajikistan, Uzbekistan have either adopted formal HCFC strategy or are in the process of doing so.<br>- Ukraine has not been able to start any activity as yet as there has been no Minister. New Minister appointed in April and it is hoped that the |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
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| | | and HCFC equipment import quota and use system is in place<br>• Low level of awareness related to HCFC phase-out across stakeholders and general public<br>• No current information products and programs | under consideration of the Government.<br>Ukraine: Political instability continued to occur. New national Ozone Focal Point was nominated. Two (2) missions from legal review and HCFC strategy formulation international experts were fielded in May and June 2015 emphasizing the need for Governmental commitment over the HCFC control. Project undergoing two-step revision process: (1) initial revision (2015) to cover remaining originally accepted project partners, and (2) deeper revision (2016), in consultations with the GEF, to re-allocate unused funding from manufacturing sector to servicing sector.<br>Uzbekistan: Overarching National Program on Phase-out of ODS adopted in 2000 by Resolution of the Cabinet of Ministers. New regulatory measures under discussion.<br>Belarus: The relevant information on National HCFC phase-out strategy with reference to the source is available on | phase-out strategy and its elements<br>• Inter-agency coordination related to HCFC phase-out is improved<br>• Effective regulatory measures (quotas etc) are updated and enforced<br>• Main stakeholders are informed about HCFC phase-out strategy and regulatory measures related to HCFC import and use control | | | implementation of the project with government ownership can be started.<br>- Belarus and Tajikistan have quota system in place. Ukraine and Uzbekistan need to make some changes to update.<br>- Training of Customs ongoing in Belarus, Tajikistan and Uzbekistan.<br>- All Customs offices equipped or being equipped with analytical equipment and Refrigerant Identifiers. |

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| | | | Internet resources.<br>Tajikistan: While developing new HCFC legislation inter-agency Task Force established. Members actively involved during development and agreement of the documents within each ministries and governmental agencies resulting final endorsement by the Government.<br>Ukraine: Project team continues efforts in the area of HCFC strategy formulation. Working level contacts prevail involving Ministry of Natural Resources, Customs and other line Ministries – current political instability does not allow for better progress in current circumstances.<br>Uzbekistan: National partners familiarized with the National HCFC Phase-out Strategy and Action Plan.<br>Belarus: Updated quota system in place.<br>Tajikistan: Instructions on allocation of quota for HCFC import to support new HCFC phase-out legislation developed and endorsed by Chairman of the Committee on | | | | |

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| | | | Environmental Protection.<br>Ukraine: HCFC licensing and quota system is in place, though recommendations for removal of exceptions/improvements were not yet adopted.<br>Uzbekistan: Project Board members are involved in discussion on update of ODS import/export control related national legislation.<br>Belarus: Main stakeholders were regularly informed about HCFC phase-out strategy and regulatory measures related to HCFC import and use control through mass media. Tajikistan: While developing HCFC phase-out strategy and regulatory measures, representative of the President Office, senior staff of line ministries and governmental agencies were informed about HCFC import and use control.<br>Ukraine: Despite political instability, awareness on the project and the need for better HCFC import control were discussed during several meetings in the Customs department. | | | | |

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| | | | National Rada (Parliament) was involved in the discussions on the HCFC control legislation and improvements required in it.<br>Uzbekistan: About 70 (more than 50% women) key stakeholders' representatives of ministries and agencies, mass media representatives and public/private HCFC users were informed on the HCFC phase-out in Uzbekistan through participating in Inception workshop of the project. | | | | |
| | 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 | • Key Government stakeholders as well as working level officials have limited awareness of HCFC phase-out issue, challenges to address it and skills/tools to enforce HCFC control measures in practice<br>• Limited active educational efforts or tools are available<br>• Illegal trade in ODS continues unregistered and unnoticed<br>• No current information products and programs | Belarus: ODS import control issues included into full- time and distant educational programs of the Customs Training Institute. Training programs, modules and educational materials on ODS management developed for higher and secondary vocational schools involved in training of refrigeration technicians.<br>Tajikistan: In close collaboration with Refrigeration Association, introductory sessions on the use of ODS equipment and other specialized equipment were carried | • Inclusion of HCFC control issues into curricula of Customs and enforcement officials' training institutions<br>• Update of study plans specialized training centers (enforcement inspectors, technicians)<br>• Well informed stakeholder community engaged in addressing HCFC phase-out issue with required level of understanding and technical capacity<br>• Re-tooling (basic portable analytical and instrumentation for servicing sector) of main stakeholder groups | | | |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
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| | | • Lack of portable HCFC analytical equipment and skills to control end use and illegal imports<br>• General absence of basic servicing tools to strengthen HCFC re-use system[1] | out for 40 customs officers.<br>Ukraine: Relations developed with State Fiscal Service (Customs). Primary order for training needs and equipment supply obtained from Custom. Study visit of Customs representatives is scheduled for August-September 2015 to Belarus on different aspects of training and ODS-detecting equipment use.<br>Uzbekistan: Training curricula for customs officers related to new developments in the area of HCFC and HCFC-based equipment import control measures/procedures for training 20 trainers from the State Customs Committee and for further training 300 customs and enforcement officials developed.<br>Belarus: Customs laboratory fully equipped with analytical equipment, and portable multi-gas analyzers were distributed to important Customs stations to screen HCFC/HFC gas | implemented<br>• Illegal trade is registered and stopped at entry points | | | |

[1] Not applicable to Ukraine

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
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| | | | cylinders. No cases of illegal trade in Belarus have been registered. Tajikistan: Joint monitoring of illegal trade/import of ODS by the Customs Service and the Committee on Environmental Protection resulted in 6 cases of illegal trade of unwanted ODS registered in 2014. Ukraine: Capacity of State Customs Committee on better control of illegal import of HCFC will be improved through equipping Customs control posts with analytical equipment. Bilateral meetings/visits are planned to other countries of the project for experience exchange. Uzbekistan: Capacity of State Customs Committee on better control of illegal import of HCFC will be improved through equipping Custom control posts with analytical equipment. | | | | |
| Targeted HCFC Phase-out Investment Program and Demonstration projects (by country) | | | | | | | |
| Belarus | | | | | | | |
| | Implementation of a foam conversion project at MAZ Kupava | • MAZ-Kupava (foam product manufacturer) depends on HCFC- | Equipment costs exceeded GEF budget and company had to agree to additional co- | • MAZ-Kupava technologically converted to non-ODS/ low GWP technology (HCFC-141b | | HS | Despite delays project is finally being implemented. All equipment, including non GEF funded equipment have |

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| | | 141b in manufacturing processes;<br>• Alternative technologies are scarcely available to the company for access and transfer, not tested at the facility and lack processing and safety instrumentation for practical introduction<br>• Refrigerated trucks with foam insulation continue to be manufactured with the use of HCFCs | financing. All equipment ordered and expected to be commissioned in Q1 2016. Delay caused by difficult financial situation in the country as a result, increased funding gap of company to fulfill its obligations for procurement the remaining part of non-ODS/low GWP technological line. Training will be provided by equipment supplier. | based polyols to c-pentane)<br>• HCFC use at MAZ Kupava stopped and company committed not to use HCFCs any longer<br>• Technical staff is knowledgeable on correct use of new technology | | | been ordered and company officials were to visit th equipment supplier in April/May for inspection and ironing out of some details. Once equipment is commissioned, the supplier will train MAZ-Kupava staff. The only concern is delays if company is unable to make payments for their components on time. |
| | Implementation of a solvent conversion project at David Gorodok Electromechanical Plant | • Atlant/David-Gorodok (solvent users) depends on HCFC-141b in manufacturing processes and this is a high emissive use of HCFCs;<br>• Alternative technologies are scarcely available to the company for access and transfer, not tested at the facility and lack processing and safety instrumentation for practical introduction<br>• Spares (compressors and others) for refrigerators continue to be manufactured | Technology elected and equipment contracted for delivery and commissioning in Q3 2015. International expert will conduct inspection and safety audit.<br>Emission control standards on ventilation and ambient air will need to be followed. It is understood that ventilation system was ready to be installed by David-Gorodok. | • Atlant/David-Gorodok technologically converted to non-ODS technology (HCFC-141b to transblends based on HFCs – closed loop cycle and minimization of agent use reduce emissions)<br>• HCFC use at Atlant/David-Gorodok stopped and company committed not to use HCFCs any longer<br>• Technical staff is knowledgeable on correct use of new technology | | HS | All equipment installed and operating. Awaiting international consultant to conduct inspection and safety audit. HCFC use has stopped and company has committed not to use HCFC any longer |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
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| | | with the use of HCFCs as degreasing agent | | | | | |
| | Demonstration of benefits of natural cooling in one or two sectors such as agricultural milk coolers | • Limited proliferation of low GWP alternatives (NH3, CO2 double stage, HCs etc) to HCFCs in refrigerated equipment;<br>• Safety standards for new low GWP alternatives do not exist<br>• 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);<br>• No current information products and programs;<br>• 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;<br>• Low readiness for/acceptance of new technologies by | 3 directions for introducing non-ODS/low GWP technologies (ammonia, carbon dioxide, propane) were considered as the most prospective for the economy of Belarus.<br>Pilot project to demonstrate the advantages of using natural refrigerant (ammonia) in modern A/C systems started. Delivery and commissioning expected Q1 2016.<br>Establishment of educational class to train refrigeration technicians on installation, maintenance, repair and retrofit air-conditioning equipment using hydrocarbons as refrigerant (propane).<br>Change of the conditioning system from freon compressors to absorption chiller(water)<br>Stakeholder community was informed about new alternative technologies and their benefits by presentations at round-table discussion with participation of over 20 members.<br>Activities on safety | • Non-ODS/low-zero GWP (NH3, CO2 double stage, HCs etc) technologies in the servicing sector demonstrated and promoted through awareness raising;<br>• Stakeholder community (private/public HCFC equipment user sector) well informed about new alternative technologies and their benefits;<br>• Local engineering companies gain knowledge and skills to assemble and operate such technologies in future;<br>• Safety standards for new alternatives reviewed and adopted;<br>• Creation of conditions for introduction and distribution of propane as a natural refrigerant for general use in systems of domestic air-conditioning and commercial sector as alternatives to HCFCs<br>• Create a demonstration platform to promote advanced energy saving and ozone-friendly technologies.<br>Introduction of new | | HS | |

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| | | end-users. | standards, recording of performance of new equipment to start shortly. | equipment allows company to save up to 1 150 000 kWh annual. It also helps to reduce CO2 pollutions.<br>• Performance of new equipment is regularly recorded;<br>• Market is more prepared for the acceptance of new alternatives. | | | |
| | Upgrade of HCFC re-use system through strengthening R/R/R centers and improving local distribution of bulk HCFC/HFCs in support of container import regulations | • HCFCs are not re-used domestically – lack of a comprehensive HCFC re-use system, and country depends on imports<br>• 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<br>• 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)<br>• Limited active educational efforts or | National scheme of collection and re-use of HCFCs in the country with the list of service centers and their functions in recycling and recovery of HCFCs, as well as a network of regional centers, which can carry out the primary collection, sorting and transport of HCFC-containing products was developed and approved by MNREP. 4 service centers have confirmed their interest and willingness to participate in implementation of the HCFC re-use scheme. Equipment identified and to be procured end 2015. Technical staff at service centers will be trained. | • Regulatory measures to ban single use containers are effected and allow to create HCFC distribution system in country;<br>• HCFC re-use system upgraded through strengthening R/R/R centers – country's technical capacity is improved;<br>• HCFC re-use system is implemented in practice allowing to reduce dependence on import of HCFCs;<br>• Technical center staff is trained on adequate use of equipment and best refrigeration practices in equipment maintenance and retrofits;<br>• Well informed stakeholder community engaged in addressing HCFC phase-out issue with required level of understanding and | | HS | - Draft HCFC Re-Use Scheme was developed (4 R/R/R service centers and Center of Analytical Control of HCFCs), agreed with the interested parties. Service Centers agreed to participate into the project under co-financing conditions<br>- Equipment for the modernization of the four R/R/R service centers and the establishment of Center of Analytical Control of HCFCs procured.<br>- Recommendations for the update of national methodology of identification of HCFC content and the draft quality control guidelines for the Center of Analytical Control of HCFCs were developed.<br>- Technical staff trained in the use of equipment.<br>- Follow up needed on how the centers are performing.<br>- Legislation, effective January 2016, in place to ban |

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| | | tools on best refrigeration servicing practices are available | | technical capacity. | | | single use. |
| | Pilot unwanted ODS Destruction Project | • Gradual accumulation of obsolete ODS waste (unusable mixtures and emptied HCFC cylinders with ODS fractions) and the acute need to dispose of such wastes;<br>• Only prototype laboratory equipment on hazardous waste processing exists with no emission controls in place;<br>• Small quantities of obsolete ODS waste to generate interest for export to major hazardous waste destruction sites<br>• Lack of integration of ODS disposal into HCFC re-use system to complete ODS management cycle<br>• Generally, lack of appropriate ODS destruction experience in Central Asia region | Analysis of international market proposals for low capacity destruction units, their cost effectiveness (operational expenses are very high) and the perspectives of introducing them into the national R/R/R scheme resulted in refusal of MNREP to acquire such kind of equipment.<br>Government considering establishing a special chlorinated waste destruction facility that would then be able to accept waste ODS gases which are also chlorinated.<br>Since the geographical position of Belarus allows for export of such wastes to EU-based qualified high-temperature incinerators (HTI) this will be one of possibilities in future once ODS waste gas levels achieve larger manageable volumes. | • Small-scale obsolete ODS destruction capacity established on a pilot basis to re-enforce the HCFC re-use system and a planned ban on single use containers;<br>• Staff trained to operate and maintain equipment;<br>• Stockpiles of obsolete ODS destroyed by supplied technology;<br>• Country is fully equipped to handle full-cycle of ODS management with demonstration element;<br>• Dissemination of results performed on the regional scale. | Project not going forward | Project not going forward | Project not going forward |
| Tajikistan | | | | | | | |
| | Demonstration of End-users Grants for retrofits/ replacements | • Alternative technologies are not commonly used for retrofit of existing | Facilities identified for application of demo projects. Preliminary list of equipment for | • Demonstrated benefits of up to date modern cooling equipment<br>• Awareness of the wider | | HS | Demonstration retrofit projects to alternative refrigerants are in the preparation stage. |

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| | | systems and are not field tested to facilitate practical introduction<br>• Refrigerated equipment in poor condition continues to be serviced with the use of HCFCs and maintained by the companies in these sectors<br>• No or minimal investment is taking place to retrofit or replace HCFC equipment with alternative refrigerant systems<br>• No or minimal information is available on opportunities to reduce dependence to HCFC | retrofit demo projects prepared.<br>Services companies provided with modern tools and equipment.<br>Studies show a shift in import from HCFC based equipment to non ODS equipment.<br>Training of technicians to start after Training of Trainers completed. | community of HCFC users raised regarding such solutions<br>• Reduced knowledge barriers towards equipment retrofits/conversions<br>• Accelerated retirement of HCFC-based equipment and HCFC use in this sector decreased<br>• 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 | | | |
| | Demonstration of benefits for natural cooling | • Limited proliferation of alternatives to HCFCs in refrigerated equipment<br>• Safety standards for new alternatives do not exist<br>• Generally low awareness on new alternative technologies in the servicing sector and benefits in energy savings (co-benefits | 3 cellular companies selected to install natural cooling technologies at base stations for demonstration and effectiveness monitoring. If successful, and energy-efficiency gains possible, project can be replicated elsewhere.<br>15 sets of equipment for application of natural cooling technologies under procurement. | • Natural cooling low-zero ODS/low-zero GWP technologies in the servicing sector demonstrated and promoted<br>• Stakeholder community (private/public HCFC equipment user sector) well informed about new alternative technologies and their benefits<br>• Local engineering companies gain knowledge and skills to | | HS | Natural cooling equipment procured, installed and operating for the past 4 months on 15 base stations of 3 cellular companies and data being monitored remotely. Initial data indicates that there has been substantial energy savings but the performance has to be seen during summer when the conditions are quite severe. Cellular company not yet convinced of the financial benefits and payback period. |

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| | | for economic operations as well as for climate change)<br>• No current information on products and programs demonstrating natural cooling technologies<br>• 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)<br>• Low readiness for/acceptance of new technologies by users | During capacity building trainings for refrigeration technicians and national workshops, more than 300 people informed about new alternative technologies and benefits demonstrated.<br>Project actively collaborating with TajikStandard to review and adopt safety standards for new alternatives.<br>Assessments show marginal price difference between HCFC equipment and equivalent non ODS equipment.<br>Consequently, local market ready to accept equipment working on alternative refrigerants. | assemble and operate such technologies in future<br>• Safety standards for new alternatives reviewed and adopted<br>• Performance/operational parameter comparison of old Vs. new equipment monitored and available<br>• Market is more prepared for the acceptance of new alternatives | | | Safety standards for alternative refrigerants still to be developed.<br>HFC-410a based a/c systems are becoming more common now. |
| | Upgrades of HCFC re-use system | • 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<br>• No proactive Refrigeration Technicians Association - | 4 R/R/R centres established under Association, equipped and staff trained.<br>Recovery machines and tools procured for smaller service companies.<br>Refrigeration Association will be part of the institute to certify refrigeration experts in order to obtain ODS license from the | • 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<br>• HCFC re-use system is implemented in practice allowing to reduce dependence on import | | HS | All equipment supplied for R/R/R center and operators trained in their use.<br>Reclaim equipment will be installed after main R/R/R center moves to larger premises.<br>What remains is to develop a costing model for recycling of recovered refrigerants brought to the centers for recycling.<br>Association very active and recognized by government. |

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| | | Association does not have mandate to demonstrate mechanism to recover and distribute purified HCFC<br>• 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<br>• Analytical equipment for servicing sector does not exist to ensure quality of re-cycled/reclaimed HCFC refrigerants and confidence of buyers<br>• Limited active educational efforts or tools are available | Committee on Environmental Protection.<br>HCFC re-use system allowed decrease of import of HCFCs by 12%.<br>Curricula for technicians of refrigerant and air-conditioning systems.<br>In close collaboration with the Ministry of labor, migration and employment, the Engineering Pedagogical College of Dushanbe and Refrigeration Association, more than 300 refrigeration technicians passed five-day refresher courses on the service delivery best practices of refrigeration equipment and air-conditioning systems, recycling, recovery and re-use of ODS (HCFCs).<br>the College will initiate a new short-term (six-months) training program for young technicians on R&AC and further integrate into the professional education system of the College. | of HCFCs<br>• Technical service center staff is trained on adequate use of equipment and best refrigeration practices in equipment maintenance and retrofits<br>• Well informed stakeholder community engaged in addressing HCFC phase-out issue with required level of understanding and technical capacity | | | It is partner of the Engineering college and provides the hands on training component for the technicians' refresher course.<br>Educational material needs translation to Tajik language. |
| Uzbekistan | | | | | | | |
| | Technical | • The only organized | AZN Techno has self- | • AZN Techno | | HS | Equipment supplied. |

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| | Assistance AZN Techno | and economically stable refrigerated equipment manufacturer in country depends on HCFCs in manufacturing processes<br>• Alternative technologies are scarcely available for access and transfer, not tested and lack instrumentation for practical introduction<br>• Refrigerated equipment continues to be manufactured and maintained by the company with the use of HCFCs | converted to water-based technology for foaming of its commercial refrigeration equipment, and its HCFC-22 charging operations have been replaced with HFC-404a technology. Once complementary equipment/training is provided, this sub-component will be considered complete. Needs of company on trainings identified and organization of trainings for technical staff on capacity development planned within the join work plan | technologically converted to non-ODS technologies (HCFC-141b polyols to water-based technology and HCFC-22 to HFCs for commercial refrigeration equipment)<br>• HCFC use at AZN Techno stopped and company committed not to use HCFCs any longer<br>• Technical staff is knowledgeable on correct use of new technologies and equipped with basic servicing instrumentation to ensure equipment servicing as per allowed international practices | | | Training to start and formal commitment from company not to use any HCFCs. |
| | Demonstration and replacement programme for the refrigeration sector | • Limited proliferation of alternatives to HCFCs in refrigerated equipment<br>• Safety standards for new alternatives do not exist<br>• Generally low awareness on new alternative technologies in the servicing sector and benefits in energy savings (co-benefits for economic | Implementation of 6 demonstration projects to start 2015/2016. Local experience with assembly of the refrigeration equipment of new non-ODS/low GWP technologies is expected to be gained. Establishment of Refrigeration and air conditioning technicians Association (RACA) initiated, charter developed and submitted for legal registration. RACA | • Non-ODS/low-zero GWP (ammonia, CO2, HCs) technologies in the servicing sector demonstrated and promoted<br>• Stakeholder community (private/public HCFC equipment user sector) well informed about new alternative technologies and their benefits<br>• Local engineering companies gain knowledge and skills to assemble and operate | | HS | - 6 demonstration projects approved. Equipment specifications being finalized. All projects expected to be completed by end 2017.<br>- Demo projects will develop demonstrable knowledge on ODS alternatives.<br>- Delay in setting up Association.<br>Not much progress in establishing safety standards for alternative refrigerants. |

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| | | operations as well as for climate change)<br>• No current information products and programs<br>• 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)<br>• Low readiness for/acceptance of new technologies by users | will administrate activities on increasing experience, knowledge and skills to assemble, install, operate and maintain HCFC-free equipment using non-ODS/low-zero. Draft guidance (manual) on energy-efficient and alternative technologies using propane in Russian prepared and will be finalized | such technologies in future<br>• Safety standards for new alternatives reviewed and adopted<br>• Performance of new equipment is regularly recorded<br>• Market is more prepared for the acceptance of new alternatives | | | |
| | Railway Freezer Retrofit project for refrigerated transport sector – Yo'lreftrans | • Weak basic servicing tooling of staff responsible for maintenance of the fleet and high refrigerant emissions due to transport and use specifics<br>• Limited scale retrofit of railway refrigerated equipment takes place which does not allow to reduce dependence on HCFCs - lack of specialized | Company will retrofit the refrigeration railway fleet from HCFC and residual CFC to HFC-134a. Project provided set of industrial type flushing system, flushing agent, limited stock of ozone friendly refrigerants and synthetic oils. Training needs of the company have been assessed, and it is currently planned to deploy trainers to help the company have their refrigeration technicians | • Fleet retrofit at Yo'lreftrans enterprise implemented and sustained during and beyond project duration<br>• Company is fully equipped with required tools and seed funding for substitute materials to initiate large-scale retrofits of the refrigerated wagons fleet<br>• Staff is trained on correct use of equipment and tools, and applies best retrofit and equipment | | HS | All equipment has been transferred to the company. After training of the technicians, retrofit work will start. |

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| | | industrial sized circuit flushing units to allow for change from mineral to synthetic oils during retrofits<br>• Generally outdated refrigerant recycling equipment to address HCFC re-use in longer term | fully prepared for retrofits. | maintenance practices across workspace | | | |
| | Upgrades of HCFC re-use system | • HCFCs are not re-used domestically – lack of a comprehensive HCFC re-use system, and country depends on imports<br>• 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<br>• Analytical equipment for servicing sector does not exist to ensure quality of re-cycled/reclaimed HCFC refrigerants and confidence of buyers<br>• Limited active educational efforts or tools are available | National consultations on selecting future HCFC re-use centers held, and technical plans of 5 HCFC recovery/recycling (R/R) and 1 HCFC reclaim centers across the country prepared. R/R centers will be established at existing refrigeration service companies in five regions. Reclaim Centre to be established at premises of the State Inspection on Analytical Control under State Committee for Nature Protection. 125 Smaller servicing companies will receive basic HCFC recovery/ equipment repair tools. Training in use and operation will be provided after equipment supplied. Training of 800 technicians in Good | • HCFC re-use system upgraded through strengthening R/R/R centers across the country in strategic locations – country's technical capacity is improved<br>• HCFC re-use system is implemented in practice allowing to reduce dependence on import of HCFCs<br>• Technical center staff is trained on adequate use of equipment and best refrigeration practices in equipment maintenance and retrofits<br>• Well informed stakeholder community engaged in addressing HCFC phase-out issue with required level of understanding and technical capacity | | HS | All Recycling center equipment procured and being distributed. Main activities remaining are:<br>1. Distribution of recovery equipment to service companies.<br>2. Training in the use of the equipment.<br>3. Develop a costing model for recycling of recovered refrigerants brought to the centers for recycling. |

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| | | | Refrigeration Management practices to start. | | | | |
| | Unwanted ODS Pilot Destruction Project | • Limited negative experience of obsolete ODS destruction in a lab setting and lack of emission controls at existing prototype lab equipment<br>• Further accumulation of obsolete ODS waste and the acute need to dispose of such wastes<br>• Small quantities of obsolete ODS waste to generate interest for export to major hazardous waste destruction sites<br>• Lack of integration of ODS disposal into HCFC re-use system to complete ODS management cycle<br>• Generally, lack of appropriate ODS destruction experience in Central Asia region | One small-scale ODS waste destruction unit manufacturer identified but technology has high operational cost and raw material usage (water, electricity). Study tour to China organized to familiarize delegation with the results of ODS destruction project implemented during 2013-2014 years, where ODS destruction unit with same specifications is in use. Economic analysis of cost effectiveness will be done to decide if project will go ahead. | • Small-scale obsolete ODS destruction capacity established on a pilot basis<br>• Staff trained to operate and maintain equipment<br>• Stockpiles of obsolete ODS destroyed by supplied technology<br>• Dissemination of results performed on the regional scale | | No Rating | Regarding ODS Pilot Destruction project: Based on Chinese experience and results of economic analysis of cost-effectiveness of the equipment, it was decided to procure small-scale/mobile ODS destruction unit, preferably "Plasma X". However, the manufacturer of "Plasma X" ASADA Corp informed about discontinuing small-scale/mobile ODS destruction unit with no resuming plans. Other manufacturers of plasma type ODS destruction equipment proposed prices at least four-five times greater than the project allocated budget amount. Thus, implementation of the project activities on pilot destruction of obsolete ODS delayed and project strategy on ODS destruction might be changed due to absence of proper ODS destruction equipment and technologies which can be procured within the planned project budget for piloting destruction of obsolete ODS. The project is developing report with all possible further actions of obsolete ODS management in Uzbekistan, which will be reviewed by the Project |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
|---|---|---|---|---|---|---|---|
| | | | | | | | Board during its next meeting in September-October 2016. |
| Ukraine | | | | | | | |
| | Information exchange platform on HCFC substitute technologies for ineligible foam manufacturers (PU and XPS) companies | • Low level of awareness related to HCFC phase-out across stakeholders from manufacturing sector;<br>• No current information products and programs on information dissemination related to alternative technologies in the manufacturing sector;<br>• Nine (9) manufacturing enterprises continue to rely on HCFCs as the only technological solution in the absence of knowledge on a range of new and emerging alternatives which may minimize capital investments. | General review performed by the project team on the changes induced by political instability and economic crisis in Ukraine, specifically in the foam sector, indicated a strong prospect for bankruptcy for XPS industry which was at the time of project preparation responsible for 50% of HCFC consumption in Ukraine. Based on the starting HCFC import and consumption data collection which includes top-down (Customs/HCFC import licensing system) and bottom-up (based on end-user survey) approaches, a survey will be made in the foam sector on remaining factories involved into PU and XPS foam manufacturing to understand the prospects related to self-conversion of GEF ineligible companies. | • Main stakeholders in the manufacturing sector are informed about new and emerging alternative technologies and various capital/operating investment aspects;<br>• At least, four (4) of the ineligible enterprises self-convert to other than HCFC technological solutions without GEF assistance;<br>• HCFC consumption is accordingly reduced by respective annual consumption amounts at a number of self-converted enterprises. | | S | Data collection survey is ongoing and expected to be completed late 2016. Uncertainty remains on what data will be available from end users. |
| | Implementation of a system house conversion project | • Polyfoam (system house) and its downstream users | The project arranged for a (South-South) study tour to a Brazil-based | • Polyfoam and its downstream users are technologically converted | | HS | Project revision approved. Project is on track, awaiting mission by International |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
|---|---|---|---|---|---|---|---|
| | at Polyfoam | continue to depend on HCFC-141b in polyol blending and consumption;<br>• Alternative technologies are scarcely available to the company, and its downstream clients, for access and transfer, not tested at the facility and lack processing and safety instrumentation for practical introduction;<br>• No current information products and programs on information dissemination related to the proposed alternative technologies in the manufacturing sector. | System House of Purcom in March 2015. The reason for the visit was the need to confirm methyl formate (MF) blend's chemical composition and infrastructure at Purcom. trial production which did not perform well in certain applications such as for refrigeration manufacturing (low density). Subsequently UNDP foam expert proposed revisions to project document design and its budget (upward but within existing donor funding rules) to match it better to the needs on the ground. Revisions in the project are planned for official approval by a project board in the second half of 2015. | to non-ODS/ low GWP technology (methyl formate)<br>• HCFC use at Polyfoam stopped and company committed not to use HCFCs any longer<br>• Technical staff is knowledgeable on correct use of new technology | | | Consultant to finalize formulations. After that downstream customers of company will be supported. |
| | Implementation of a foam conversion project at Intertehnika | • Intertehnika (commercial refrigeration manufacturing) depends on HCFC-141b in its manufacturing processes (either of domestic manufacture or import);<br>• Alternative technologies are scarcely available to the company for | Company had self-converted to hydrocarbons after its facility (commercial refrigeration equipment - drinks stands, etc) was co-located with main Nord facility (domestic refrigeration) before armed conflict developed and it changed ownership.<br>The company is not accessible as situated in the area of armed conflict. Project planned | • Intertehnika technologically converted to non-ODS/ low GWP technology (HCFC-141b based polyols to c-pentane)<br>• HCFC use at Intertehnika stopped and company committed not to use HCFCs any longer<br>• Technical staff is knowledgeable on correct use of new technology | Project cancelled | No Rating | |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
|---|---|---|---|---|---|---|---|
| | | access and transfer, not tested at the facility and lack processing and safety instrumentation for practical introduction;<br>• Commercial equipment manufactured by the company continues to be produced with HCFC-141b in foam insulation. | for removal from participation in the project which will be discussed and endorsed in a project board meeting in the second half of 2015. | | | | |
| | Implementation of a foam conversion project at Sobraniye | • Sobraniye (XPS foam product manufacturer) depends on HCFCs (R-22 and sporadically 141b) in its manufacturing processes;<br>• Alternative technologies are scarcely available to the company for access and transfer, not tested at the facility and lack processing and safety instrumentation for practical introduction<br>• Refrigerated trucks with foam insulation continue to be manufactured with the use of HCFCs | The company is bankrupted due to the overall financial situation in the country developed with political instability and military activities. No HCFC in use. | • Sobraniye technologically converted to non-ODS/ low GWP technology (to carbon dioxide technology);<br>• HCFC use at Sobraniye stopped and company committed not to use HCFCs any longer;<br>• Technical staff is knowledgeable on correct use of new technology. | Project cancelled | No Rating | |
| | Implementation of a solvent conversion project at Nord | • Nord (solvent user) depends on HCFC-141b in manufacturing | The company is not accessible as situated in the area of armed conflict and changed ownership. | • Nord technologically converted to non-ODS technology (HCFC-141b to transblends based on | Project cancelled | No Rating | |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
|---|---|---|---|---|---|---|---|
| | | processes and this is a high emissive use of HCFCs;<br>• Alternative technologies are scarcely available to the company for access and transfer, not tested at the facility and lack processing and safety instrumentation for practical introduction;<br>• Spares (compressors and others) for refrigerators continue to be manufactured with the use of HCFC-141b as a degreasing agent. | Project planned for removal from participation in the project which will be discussed and endorsed in a project board meeting in the second half of 2015 | HFCs – closed loop cycle and minimization of agent use reduce emissions);<br>• HCFC use at Nord stopped and company committed not to use HCFCs any longer;<br>• Technical staff is knowledgeable on correct use of new technology. | | | |
| **Outcome 3: Monitoring, learning, adaptive feedback, outreach and evaluation (all countries)** | | | | | | | |
| **Outcome 3: Monitoring, learning, adaptive feedback, outreach and evaluation** | M&E and adaptive management applied to project in response to needs, mid-term evaluation findings with lessons learned extracted. | • No Monitoring and Evaluation system<br>• No evaluation of project output and outcomes | Project monitoring conducted in accordance with Monitoring and Evaluation Plan. Progress quarterly, semester and annual reports on the project implementation were prepared. Detailed work plans and project budgets were prepared, reviewed/revised and updated in response to the identified changes in current needs and requirements. Evaluation framework was discussed with | • Monitoring and Evaluation system developed during year 1.<br>• Mid-term-evaluation of project output and outcomes conducted with lessons learnt at 30 months of implementation.<br>• Final evaluation report ready in the end of project | | HS | Project monitoring is ongoing by all countries. Mid Term Review under completion |

| Project Strategy Objective/Outcome | Indicator | Baseline Level | Level in 2nd PIR | End of Project Target | Mid Term Level and Assessment | Achievement Rating | Justification for Rating |
|---|---|---|---|---|---|---|---|
| | | | partner countries during the project review meeting in Istanbul in June 2015.<br>One evaluator to be recruited for Mid Term Review to ensure consistent reporting in one document. To take place in October-November 2015.<br>Final evaluation planned for March 2018. | | | | |

**Annex 2**

**Mid Term Review**

**Terms of Reference**

## BASIC CONTRACT INFORMATION

**Location:** Home based with travel to Turkey, Belarus, Tajikistan, Ukraine and Uzbekistan
**Application Deadline:** 13-Nov-2015
**Category:** Ozone Depleting Substances
**Type of Contract:** Individual Contract
**Assignment Type:** International Consultant
**Languages Required:** English
**Starting Date:** Estimated 4-Dec-2015 – April 2016
**Duration of Initial Contract:** Approximately 60 days over a period of 18 weeks

## BACKGROUND

### A. Project Title

- Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (Belarus, Tajikistan, Ukraine and Uzbekistan)

### *1.1.1.1.1 B. Project Description*

This is the Terms of Reference (ToR) for the UNDP-GEF Midterm Review (MTR) of the full-sized project titled "Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (Belarus, Tajikistan, Ukraine and Uzbekistan)" (PIMS 4309) implemented through the UNDP Istanbul Regional Hub, and UNDP Country Offices in respective partner countries, which is to be undertaken in 2015. The project started on the *30 July 2013* and is in its third year of implementation. In line with the UNDP-GEF Guidance on MTRs, this MTR process was initiated before the submission of the second Project Implementation Report (PIR). The MTR process must follow the guidance outlined in the document *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* (see Annex).

The project was designed to respond to the obligations incurred by participating countries (Belarus, Tajikistan, Ukraine and Uzbekistan) under their respective phase out schedule for HCFCs of the Montreal Protocol. It is a timely capacity building effort (with investment elements for the manufacturing, where existing, and servicing sectors) designed to improve regulatory measures to help address the accelerated HCFC phase-out in the medium and longer term, and to strengthen the preparedness for the complete phase-out of HCFCs from current use.

The project document has been designed to address the following two main components (regional and national):

- Component 1 (Regional information exchange and networking component), addressing barriers associated with incomplete knowledge and awareness and which is aligned with PIF Component 1; Outcomes 1(a-d) - the component to be implemented on UNDP regional level (initially out of UNDP Bratislava Regional Center, and later on from a new UNDP Istanbul Regional Hub);

- Component 2 (National capacity building and technical assistance component), targeting 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 the Environmental Inspectorate and Customs Departments and refrigeration technicians, technological conversions for solvents and rigid foams, modernization of HCFC re-use scheme in the country and demonstration of alternative technologies in refrigeration equipment and A/C sectors, pilot small-scale ODS destruction.

**DUTIES AND RESPONSIBILITIES**

*1.1.1.1.2* ***C. Scope of Work and Key Tasks***

The MTR consultant will first conduct a document review of project documents (i.e. PIF, UNDP Initiation Plan, Project Document, ESSP, Project Inception Report, PIRs, Finalized GEF focal area Tracking Tools, Project Appraisal Committee meeting minutes, Financial and Administration guidelines used by Project Team, project operational guidelines, manuals and systems, etc.) provided by the Project Team and Commissioning Unit. The MTR consultant will review the new guidelines developed by the GEF for Tracking Tools for ODS projects. Then MTR consultant will participate in a MTR inception workshop to clarify her understanding of the objectives and methods of the MTR, producing the MTR inception report thereafter. The MTR mission will then consist of interviews and site visits to Dushanbe, Istanbul, Kiev, Minsk, and Tashkent as primary locations with additional visits to projects sites as deemed necessary in each country.

The MTR consultant will assess the following four categories of project progress and produce a draft and final MTR report. See the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects* (*http://web.undp.org/evaluation/guidance.shtml#gef*) for requirements on ratings. No overall rating is required.

**1. Project Strategy**

*Project Design:*

- Review the problem addressed by the project and the underlying assumptions. Review the effect of any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document.
- Review the relevance of the project strategy and assess whether it provides the most effective route towards expected/intended results.
- Review how the project addresses country priorities
- Review decision-making processes

*Results Framework/Logframe:*

- Undertake a critical analysis of the project's logframe indicators and targets, assess how "SMART" the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound), and suggest specific amendments/revisions to the targets and indicators as necessary.
- Examine if progress so far has led to, or could in the future catalyse beneficial development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis.

**2. Progress Towards Results**

- Review the logframe indicators against progress made towards the end-of-project targets; populate the Progress Towards Results Matrix, as described in the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; colour code progress in a "traffic light system" based on the level of progress achieved; assign a rating on progress for the project objective and each outcome; make recommendations from the areas marked as "not on target to be achieved" (red).
- Compare and analyse the GEF Tracking Tool at the Baseline with the one completed right before the Midterm Review.
- Identify remaining barriers to achieving the project objective.
- By reviewing the aspects of the project that have already been successful, identify ways in which the project can further expand these benefits.

**3. Project Implementation and Adaptive Management**

Using the *Guidance For Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects*; assess the following categories of project progress:

- Management Arrangements
- Work Planning
- Finance and co-finance
- Project-level monitoring and evaluation systems
- Stakeholder Engagement
- Reporting
- Communications

**4. Sustainability**

Assess overall risks to sustainability factors of the project in terms of the following four categories:

- Financial risks to sustainability
- Socio-economic risks to sustainability
- Institutional framework and governance risks to sustainability
- Environmental risks to sustainability

The MTR consultant will include a section in the MTR report setting out the MTR's evidence-based **conclusions**, in light of the findings.

Additionally, the MTR consultant is expected to make **recommendations** to the Project Team. Recommendations should be succinct suggestions for critical intervention that are specific, measurable, achievable, and relevant. A recommendation table should be put in the report's executive summary. The MTR consultant should make no more than 15 recommendations total.

#### *1.1.1.1.3* ***D. Expected Outputs and Deliverables***

The MTR consultant shall prepare and submit:

- MTR Inception Report: MTR consultant clarifies objectives and methods of the Midterm Review no later than 1 week before the MTR mission. To be sent to the Commissioning Unit and project management. Approximate due date: (23 December 2015)
- Presentation: Initial Findings presented to project management and the Commissioning Unit at the end of the MTR mission. Approximate due date: (29 February 2016)

- Draft Final Report: Full report with annexes within 3 weeks of the MTR mission. Approximate due date: (22 March 2016)
- Final Report*: Revised report with annexed audit trail detailing how all received comments have (and have not) been addressed in the final MTR report. To be sent to the Commissioning Unit within 1 week of receiving UNDP comments on draft. Approximate due date: (30 March 2016)

*The final MTR report must be in English. If applicable, the Commissioning Unit may choose to arrange for a translation of the report into a language more widely shared by national stakeholders.

**E. Institutional Arrangement**

The principal responsibility for managing this MTR resides with the Commissioning Unit. The Commissioning Unit for this project's MTR is UNDP Istanbul Regional Hub where the regional component of the regional project is being coordinated from.

The Commissioning Unit will contract the consultants and ensure the timely provision of per diems and travel arrangements for the MTR consultant which will be covered in one lump-sum. The Project Team will be responsible for liaising with the MTR consultant to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

**F. Duration of the Work**

The total duration of the MTR will be *60 days* over a period of *18 weeks* starting *4 December 2015,* and shall not exceed five months from when the consultant(s) are hired. The tentative MTR timeframe is as follows:

- *(13 November 2015):* Application closes
- *(4 December 2015):* Selection of MTR Consultant
- *(9 December 2015) – 5 days:* Prep the MTR Consultant (handover of project documents); briefings
- *(14 December 2015) – 8 days:* Document review and preparing MTR Inception Report
- *(23 December 2015) – 2 days:* Finalization and Validation of MTR Inception Report- latest start of MTR mission
- *(25 December 2015 – 29 February 2016) – 28 days in total (6 days each of the countries and 4 days in Istanbul):* MTR mission - stakeholder meetings, interviews, field visits
- *(5 March 2016):* Mission wrap-up meeting & presentation of initial findings - earliest end of MTR mission
- *(12 March 2016) – 10 days:* Preparing draft report
- *(22 March 2016) – 5 days:* Incorporating audit trail on draft report/Finalization of MTR report
- *(28 March 2016) – 2 days:* Preparation & Issue of Management Response
- *(30 March 2016):* Expected date of full MTR completion

The date start of contract is *4 December 2015.*

**G. Duty Station**

**Travel:**

- International travel will be required to Belarus, Tajikistan, Turkey, Ukraine and Uzbekistan during the MTR mission, and all costs associated with travel will be a part of the lump-sum for this assignment;

- The Basic Security in the Field II and Advanced Security in the Field courses must be successfully completed prior to commencement of travel;
- Individual Consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director.
- Consultants are required to comply with the UN security directives set forth under https://dss.un.org/dssweb/

**REQUIRED SKILLS AND EXPERIENCE**

**H. Qualifications of the Successful Applicants**

The selection of consultants will be aimed at maximizing the overall "team" qualities in the following areas:

- Experience working with the GEF or GEF-evaluations;
- Work experience in relevant technical area (Montreal Protocol) for at least 5 years;
- A Master's degree in chemistry, physics, engineering, environmental science, or other closely related field.
- Recent experience with result-based management evaluation methodologies will be considered an asset;
- Experience applying SMART indicators and reconstructing or validating baseline scenarios will be considered an asset;
- Competence in adaptive management, as applied to the Montreal Protocol focal area of the GEF;
- Experience working in the Europe and CIS region of the project will be considered an asset;
- Demonstrated understanding of issues related to gender and the Montreal Protocol focal area; experience in gender sensitive evaluation and analysis will be considered an asset;
- Project evaluation/review experiences within United Nations system will be considered an asset.

***Consultant Independence:***
The consultants cannot have participated in the project preparation, formulation, and/or implementation (including the writing of the Project Document) and should not have a conflict of interest with project's related activities.

**APPLICATION PROCESS**

**I. Scope of Price Proposal and Schedule of Payments**

***Financial Proposal:***

- Financial proposals must be "all inclusive" and expressed in a lump-sum for the total duration of the contract. The term "all inclusive" implies all cost (professional fees, travel costs, living allowances etc.);
- The lump sum is fixed regardless of changes in the cost components.

***Schedule of Payments:***

- 20% of payment upon approval of the final MTR Inception Report, and mission travel plan;
- 30% of payment upon completing missions to all countries;
- 30% upon submission of the draft MTR report;

- 20% upon finalization of the MTR report.

**J. Recommended Presentation of Offer**

a) Completed **Letter of Confirmation of Interest and Availability** using the template provided by UNDP;
b) **Personal CV and a P11 Personal History form**;
c) **Brief description of approach to work/technical proposal** of why the individual considers him/herself as the most suitable for the assignment, and a proposed methodology on how they will approach and complete the assignment; (max 1 page)
d) **Financial Proposal** that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs, as per template provided. If an applicant is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the applicant must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP. See Letter of Confirmation of Interest template for financial proposal template.

All application materials should be submitted online by ***13 November 2015.*** Incomplete applications will be excluded from further consideration.

**K. Criteria for Selection of the Best Offer**

The award of the contract will be made to the Individual Consultant who has obtained the highest Combined Score and has accepted UNDP's General Terms and Conditions. Only those applications which are responsive and compliant will be evaluated. The offers will be evaluated using the "Combined Scoring method" where:

a) The educational background and experience on similar assignments will be weighted a max. of 70% as following:
   - Experience working with the GEF or GEF-evaluations: 15 Points;
   - Work experience in relevant technical area (Montreal Protocol) for at least 5 years:15 points;
   - A Master's degree in chemistry, physics, engineering, environmental science, or other closely related field: 10 Points;
   - Recent experience with result-based management evaluation methodologies will be considered an asset: 5 points;
   - Experience applying SMART indicators and reconstructing or validating baseline scenarios will be considered an asset: 5 points;
   - Competence in adaptive management, as applied to the Montreal Protocol focal area of the GEF: 5 points;
   - Experience working in the Europe and CIS region of the project will be considered an asset: 5 points;
   - Demonstrated understanding of issues related to gender and the Montreal Protocol focal area; experience in gender sensitive evaluation and analysis will be considered an asset: 5 points;
   - Project evaluation/review experiences within United Nations system will be considered an asset: 5 points.

b) The price proposal will weigh as 30% of the total scoring.

## Annex 3

### UNDP-GEF Midterm Review Evaluative Matrix Template

**1.2** *From the* ***Guidance on Conducting Midterm Reviews of UNDP-Supported, GEF-Financed Projects***[2]

(June 2014)

| Evaluative Questions | Indicators | Sources | Methodology |
|---|---|---|---|
| **Project Strategy: To what extent is the project strategy relevant to country priorities, country ownership, and the best route towards expected results?** | | | |
| Does the country have ownership of the project? | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What problems are addressed by the project and the underlying assumptions. Are there any incorrect assumptions or changes to the context to achieving the project results as outlined in the Project Document | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What is the relevance of the project strategy and does it provide the most effective route towards expected/intended results? | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| Does the project address country priorities? | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What are the decision-making processes | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| How "SMART" are the midterm and end-of-project targets are (Specific, Measurable, Attainable, Relevant, Time-bound) | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What progress so far has led to, or could in the future catalyse beneficial | Relationships established, level of coherence between project design and | Project documents, national policies or strategies, websites, project staff, | Document analysis, data analysis, interviews with project staff, interviews |

[2] See <http://gef.undp.org/uploads/H-Jk1_dCXqGqaPG4BlccvA/Guidance_for_Conducting_Midterm_Reviews_of_UNDP-Supported_GEF-Financed_Projects_Final_June_2014.pdf>

| | | | |
|---|---|---|---|
| development effects (i.e. income generation, gender equality and women's empowerment, improved governance etc...) that should be included in the project results framework and monitored on an annual basis | implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | project partners, data collected throughout the MTR mission, etc. | with stakeholders, etc. |
| **Progress Towards Results: To what extent have the expected outcomes and objectives of the project been achieved thus far?** | | | |
| What is the progress made towards the end-of-project targets | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What are the remaining barriers to achieving the project objective | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| **Project Implementation and Adaptive Management: Has the project been implemented efficiently, cost-effectively, and been able to adapt to any changing conditions thus far? To what extent are project-level monitoring and evaluation systems, reporting, and project communications supporting the project's implementation?** | | | |

| | | | |
|---|---|---|---|
| What are the management arrangements? | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| Work Planning | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| Data and information on finance and co-finance | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What Project-level monitoring and evaluation systems are in place | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What is the Stakeholder Engagement? | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| | | | |
| **Sustainability: To what extent are there financial, institutional, socio-economic, and/or environmental risks to sustaining long-term project results?** | | | |
| What are the financial risks to sustainability? | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What are the socio-economic risks to sustainability? | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What are the institutional framework and governance risks to sustainability? | Relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | Project documents, national policies or strategies, websites, project staff, project partners, data collected throughout the MTR mission, etc. | Document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc. |
| What are the environmental risks to sustainability? | Relationships established, level of coherence between project design and | Project documents, national policies or strategies, websites, project staff, | Document analysis, data analysis, interviews with project staff, interviews |

| | | | |
|---|---|---|---|
| | implementation approach, specific activities conducted, quality of risk mitigation strategies, etc. | project partners, data collected throughout the MTR mission, etc. | with stakeholders, etc. |

**Annex 4**

## Draft Discussion Points for MTR

### HCFC Phase Out Targets

- By chemical, by application - what is the baseline and what has been the consumption (MT) each year from 2010. Is it possible to provide 2015 data?
- What is the projected phase out target by year till zero consumption is achieved?

### Legislative and Policy Options for HCFC control and phase-out

- What Legislative, Regulative and Policy options are in place currently for HCFC control? Provide summaries.
- What is pending finalisation? Provide summaries.
- Are there any bans in place or planned on a) import of HCFC based equipment; b) new manufacturing facilities using HCFCs; and c) other? Please provide details
- What economic/fiscal instruments are in place/under considerations?
- Mechanisms and capacity for prosecution and enforcement?
- Sanctions or penalties to be imposed on violation of legal regulations?
- Has the quota system for HCFCs been established? How is it set for each year? Provide documentation
- Is the quota system legislated/regulated? Provide summary
- Is there a licensing system for import and use of HCFCs in place? Is it mandated by legislation/regulation? Provide summary of how licensing is done.
- Is there a requirement of Proof of Origin documentation for imports of HCFCs and HCFC using equipment? Who verifies this documentation?
- Is reporting of consumption and use by importers/users mandated by legislation/regulation? How often? Provide format.
- Channel of Communication between Government (the licensing authority) and Customs
- National system of Harmonised Customs Codes in order to identify ODSs and ODS mixtures
- Does Customs report import and export data to Government entity managing HCFC phase out? How often is it done? Provide sample data report.
- Is Customs data compared with reports from importers? If there is a discrepancy how is it checked and rectified?
- Sampling or other identification methods used
- Procedures to be applied in case of suspicious shipments
- What is the system of monitoring and reporting on exports of ODS

### Prior Informed Consent (PIC)

- Has PIC been formalised with neighboring countries and with countries through which ODS and ODS using equipment transit to and from your country? How effective is it and are there any delays in obtaining consent?
- What is the process for obtaining PIC?

### Standards

- Have standards been set for single use containers, container sizes, ban on reuse of single use cylinders?
- What other standards have been set related to HCFCs?
- Is Customs responsible to ensure that all imports meet these standards?

**Gender Mainstreaming**

- What steps have been taken for gender mainstreaming in all the HCFC phase out activities?

**Training of Customs and Environmental/Technical Inspection authorities**

- Has training material been made available in Russian/local language?
- Is the training sustainable i.e. has national capacity been established? How?
- How many local trainers have been trained by Master Trainer(s)?
- How many Customs and Environmental/Technical Inspection authorities were planned to be trained under the project?
- How many have been trained in and in how many training programs?
- Has the training been as per schedule or have there been any delays? If so, what are the causes of the delay?
- Have refrigerant analysers been distributed to Customs and Environmental/Technical Inspection authorities? Are they enough to cover all border entry/exit points through which HCFCs could enter/exit?

**Training of Technicians**

- Has training material been made available in Russian/local language?
- Is the training sustainable i.e. has national capacity been established? How?
- How many local trainers have been trained by Master Trainer(s)?
- How many refrigeration and air-conditioning technicians were planned to be trained under the project?
- How many have been trained in and in how many training programs?
- Has the training been as per schedule or have there been any delays? If so, what are the causes of the delay?
- How are technicians identified for training?
- Is there a requirement for technicians to be certified? Is it legislated?
- What activities cannot be done by an uncertified technician?
- Have any basic refrigeration tools been distributed to the technicians? How were the beneficiaries selected? What equipment was distributed?
- Have any recovery/recycling machines been distributed to technicians? How were the beneficiaries selected?
- Is there a Refrigeration Technicians Association? What support is given to them? How are they contributing to the HCFC phase out?

**Regional Cooperation**

- Is there active exchange of information with other Article 5 and non Article 5 countries in the region?
- How does this exchange of information happen?

**Investment Projects (conversion of manufacturers using HCFCs to non HCFC and demonstration retrofit projects)**

- What is the status of investment projects in the country?
- Have they been completed and if so, a Certificate of Completion (CoC) issued? If so, would like to see the CoC(s).
- If not completed are they on track or are there delays? If delayed, reasons for delay.
- Are there any demonstration retrofit projects proposed?
- What is the status of completion?
- If not completed are they on track or are there delays? If delayed, reason for delay.

**Recovery/Recycling/Reclaim**

- Is there a recovery/recycling project ongoing?
- Is recovery/recycling mandated by legislation?
- Is it centralised or have the larger service companies been given the equipment?
- What equipment has been supplied and how were they distributed?
- Does NOU receive regular reports of quantities recovered and recycled? How often are these reports received? Is reporting mandatory?
- Is the reported data verified?
- How is recycled HCFC put back into the market? Is it sold?

**ODS Waste**

- Is recovered ODS that cannot be recycled stored for ongoing/future disposal?
- What arrangements are there for storage and how does he NOU keep track of the quantities that are awaiting disposal?
- What is done with suspicious/seized HCFCs held by Customs?
- If they are virgin HCFCs are they auctioned and removed from the annual import quota?
- Does your country have a ODS waste disposal/destruction project? If so, please provide details.

**Finance**

- Please provide table by line of funding approved, disbursed and obligated and a comment section.

**Awareness**

- Has awareness program for decision makers on Legislation/Regulations/Policy been implemented? How was this done
- Are additional awareness programs on this subject planned? If so, when.
- Have any awareness programs been conducted for end users? How, and can the impact be measured?

**Monitoring and Evaluation**

- Is there an ongoing monitoring and evaluation of the implementation of the project?
- Who conducts it and who is the report sent to?

- How often does the project committee meet to take into account the progress of the project and the M&E report?

**Project Management**

- A short description of how the project implementation is managed and the reporting structure.

## Annex 5

### MTR Ratings Scales

| **Ratings for Progress Towards Results:** (one rating for each outcome and for the objective) | | |
|---|---|---|
| 6 | Highly Satisfactory (HS) | The objective/outcome is expected to achieve or exceed all its end-of-project targets, without major shortcomings. The progress towards the objective/outcome can be presented as "good practice". |
| 5 | Satisfactory (S) | The objective/outcome is expected to achieve most of its end-of-project targets, with only minor shortcomings. |
| 4 | Moderately Satisfactory (MS) | The objective/outcome is expected to achieve most of its end-of-project targets but with significant shortcomings. |
| 3 | Moderately Unsatisfactory (HU) | The objective/outcome is expected to achieve its end-of-project targets with major shortcomings. |
| 2 | Unsatisfactory (U) | The objective/outcome is expected not to achieve most of its end-of-project targets. |
| 1 | Highly Unsatisfactory (HU) | The objective/outcome has failed to achieve its midterm targets, and is not expected to achieve any of its end-of-project targets. |

### Indicator Assessment Key

| Green= Achieved | Yellow= On target to be achieved | Red= Not on target to be achieved |
|---|---|---|

| **Ratings for Project Implementation & Adaptive Management:** (one overall rating) | | |
|---|---|---|
| 6 | Highly Satisfactory (HS) | Implementation of all seven components – management arrangements, work planning, finance and co-finance, project-level monitoring and evaluation systems, stakeholder engagement, reporting, and communications – is leading to efficient and effective project implementation and adaptive management. The project can be presented as "good practice". |
| 5 | Satisfactory (S) | Implementation of most of the seven components is leading to efficient and effective project implementation and adaptive management except for only few that are subject to remedial action. |
| 4 | Moderately Satisfactory (MS) | Implementation of some of the seven components is leading to efficient and effective project implementation and adaptive management, with some components requiring remedial action. |
| 3 | Moderately Unsatisfactory (MU) | Implementation of some of the seven components is not leading to efficient and effective project implementation and adaptive, with most components requiring remedial action. |
| 2 | Unsatisfactory (U) | Implementation of most of the seven components is not leading to efficient and effective project implementation and adaptive management. |
| 1 | Highly Unsatisfactory (HU) | Implementation of none of the seven components is leading to efficient and effective project implementation and adaptive management. |

| **Ratings for Sustainability:** (one overall rating) | | |
|---|---|---|
| 4 | Likely (L) | Negligible risks to sustainability, with key outcomes on track to be achieved by the project's closure and expected to continue into the foreseeable future |
| 3 | Moderately Likely (ML) | Moderate risks, but expectations that at least some outcomes will be sustained due to the progress towards results on outcomes at the Midterm Review |
| 2 | Moderately Unlikely (MU) | Significant risk that key outcomes will not carry on after project closure, although some outputs and activities should carry on |
| 1 | Unlikely (U) | Severe risks that project outcomes as well as key outputs will not be sustained |

**Annex 6**

## Mission Itinerary

| Day | Date | Flt. No | From | ETD | To | ETA |
|---|---|---|---|---|---|---|
| Sun | 13/03 | AC463 | Ottawa | 1800 | Toronto | 1920 |
| | | AC6680 | Toronto | 2245 | | |
| Mon | 14/03 | | | | Istanbul | 1530 |
| | | | | | | |
| Sat | 19/03 | TK283 | Istanbul | 1230 | Minsk | 1600 |
| | | | | | | |
| Sat | 26/03 | TK 284 | Minsk | 1700 | Istanbul | 1840 |
| Sun | 27/03 | TK370 | Istanbul | 1835 | | |
| Mon | 28/03 | | | | Tashkent | 0110 |
| | | | | | | |
| Sun | 03/04 | TK371 | Tashkent | 0245 | Istanbul | 0600 |
| | | TK254 | Istanbul | 2045 | | |
| Mon | 04/04 | | | | Dushanbe | 0335 |
| | | | | | | |
| Sat | 09/04 | TK255 | Dushanbe | 0530 | Istanbul | 0850 |
| | | TK459 | Istanbul | 1805 | Kiev | 2005 |
| | | | | | | |
| Sat | 16/04 | AC9208 | Kiev | 1405 | Frankfurt | 1555 |
| | | AC877 | Frankfurt | 1715 | Toronto | 1930 |
| | | AC470 | Toronto | 2230 | Ottawa | 2333 |

**Annex 7**

## List of Persons Interviewed

| Name of Person | Organisation | Designation |
|---|---|---|
| ***Regional Project Meeting, Istanbul*** | | |
| Mr. Rastislav Vrbensky | UNDP Istanbul Regional Hub | Manager |
| Mr. Maksim Surkov | | Programme Specialist, MPU/Chemicals – responsible for national component |
| Mr. Etienne Gonin | | Programme Analyst, MPU/Chemicals - responsible for regional component |
| Mr. Selimcan Azizoglu | | Project Manager |
| Ms. Barbora Galvankova | | Programme specialist, Gender equality & Women's empowerment |
| Ms. Livia Buzova | | Administrative and Operations Consultant, MPU/Chemicals |
| Mr. Halvart Koppen | UNEP Ozone Action Programme | Regional Officer for Europe and Central Asia |
| Mr. Richard Cooke | International Consultant | |
| Ms. Anna Kirilenko | International Consultant | |
| Mr. Sergei Vladimirovich Zavyalov | Ministry of Natural Resources and Environmental Protection, Belarus | National Project Coordinator - Head of the Department for Regulation of Impact on Ambient Air and Water Resources |
| Ms. Liudmila Tratsevskaya | UNDP Belarus | Project Manager |
| Mr. Igar Tchoulba | | Programme Analyst |
| Mr. Aleksandr Bambiza | | Scientific Coordinator |
| Mr. Suhrob Raupov | UNDP Tajikistan | Project Manager |
| Mr. Khurshed Khusaynov | | Technical Advisor, HCFC Phase Out Project |
| Ms. Valentyna Vasylenko | Ozone Focal Point, Ukraine | Ministry of Ecology and Natural Resources, Ukraine |
| Mr. Andriy Taraba | UNDP Ukraine | Project Manager |
| Ms. Alla Tynkevych | | Programme Associate |
| Ms. Nadejda Dotsenko | State Committee for Nature Protection, Uzbekistan | National Project Coordinator - Head of the Main Department for Atmosphere Air Protection |
| Mr. Abror Khodjaev | UNDP Uzbekistan | Project Manager |
| Ms. Rano Baykhanova | | Climate Change Specialist |
| | | |
| ***Belarus*** | | |
| Ms. Liudmila Tratsevskaya | UNDP Belarus | Project Manager |
| Mr. Igar Tchoulba | | Programme Analyst |
| Aleksandr Bambiza | | Scientific Coordinator |
| Iryna Usava | | Demo Projects Coordinator |
| Galina Bolshakova, | | Administrative and Finance Assistant |
| Zavyalov Sergei | Ministry of Natural Resources and Environmental Protection | National Project Coordinator, Head of the Department for Regulation of Impact on Ambient Air and Water Resources |
| Klimenko Nataliya, | | Consultant of the Department for |

| Name of Person | Organisation | Designation |
|---|---|---|
| | | Regulation of Impact on Ambient Air and Water Resources |
| Ananyeva Valentina | Customs Training Institute | Chief |
| Olga Blagorenko | | Senior Lecturer |
| Yuri Polyakov | | Deputy Chief, Laboratory |
| Victor Vasilevsky | MAZ-Kupava | Deputy Director |
| Pavel Sergeev | | Chief Engineer Deputy – Technical Center Head |
| Ekaterina Chernoshei | Association of Microclimate and Cold (APIMH) | Deputy Director |
| Nikolai Zhuk | | Technical Expert |
| Maria Tsvirko | | Technical Expert |
| | | |
| ***Tajikistan*** | | |
| Mr. Khurshed Kholov | UNDP Tajikistan | EEP Programme Manager |
| Mr. Suhrob Raupov | | Project Manager |
| | | |
| Mr. Khurshed Khusaynov | | Technical Advisor, HCFC Phase Out Project |
| Ms. Zulaikho Zokirova | Engineering Pedagogical College in Dushanbe | Director |
| Abdikarim Kurbanov | National Ozone Center | Head |
| Bakhtiyor Jabborov | Refrigeration Association Center | Head |
| Mr. Alexandr Paksyutkin | LLC Vostok | Director |
| Mr. Behzod Faizullaev | CJSC " Babilon-M | Head |
| Mr. Komyor Yormahmadzoda and colleagues | Customs Service | |
| Mr. Kiyomiddin Davlatzoda | State Agency of Statistics | Deputy Director |
| | | |
| ***Ukraine*** | | |
| Mr. Janthomas Hiemstra, | UNDP Ukraine | Country Director |
| Mr. Sergiy Volkov | | Senior Programme Manager |
| Ms. Alla Tynkevych | | Programme Associate |
| Ms. Nina Paashchenko | | Project Assistant |
| Mr. Olexandr Bondar | State Ecological Academy of Post – Graduate Education and Management | Rector |
| Ms. Vanda Baranovska | | Pro-Rector |
| Ms. Vera Smalyar | Research Center of Environmental Safety and Nature | Director |
| Mr. Viktor Chupilko | LLC Polyfoam | Director |
| Ms. Yuliia Shadevska | State Fiscal Service of Ukraine | Acting Director, Specialized Laboratory |
| Ms. Tatiana Migas | | First Deputy of Acting Director, Specialized Laboratory |
| Mr. Vladymyr Tkachenko | | Deputy of Acting Director, Specialized Laboratory |
| Mr. Leonid Muromtsev | | Head, Directorate for Foreign Economic Activity Regulation Measures, Department of Customs Control and Processing |
| Ms. Valentyna Vasylenko | Ministry of Ecology and Natural Resources of Ukraine | Focal Point for the Vienna Convention and Montreal Protocol Implementation, Deputy Head of Administration - Head of |

| Name of Person | Organisation | Designation |
|---|---|---|
| | | Department for environmental monitoring, audit and technical regulation of the Directorate for environmental monitoring and atmospheric air |
| Mr. Serhiy Salata | | Head, Directorate for Ecological Monitoring, Audit and Atmospheric Air |
| Mr. Volodymyr Buchko | | Director of Legal Department |
| Mr. Anatoliy Gamera | | National Consultant – HCFCs' data collection |
| Mr. Chetveryakov | | National Consultant – ODS waste |
| | | |
| ***Uzbekistan*** | | |
| Stefan Priesner | UNDP Uzbekistan | Resident Representative |
| Abduvakkos Abdurahmanov | | Head of EEU |
| Abror Khodjaev | | Project Manager |
| Farkhat Saydiyev | | National Technical Coordinator |
| Oybek Khayitov | | Admin-finance Assistant |
| Mr. Akhadov Abbos | | Natural Resources Management Specialist, Environment and Energy Unit |
| Mr. Meliboev Anvar | | Partnership and Communications Specialist |
| Ms. Kuchkarova Madina | | Project Clerk |
| Alexander Osipov | | National MTR Consultant |
| Ms. N. Dotsenko | State Committee for Nature Protection | National Project Coordinator and Head of the Main Department for Atmosphere Air Protection |
| Dilshod Shakhobiddinov, | | Leading Specialist of Fergana region |
| Shamurotov Erkin | PE "Shomur" | Chairman |
| Yodgorov Alisher | PE "Albatross" | Chairman |
| Akmal Ismailov | JSC "Yo'lreftrans" | Chief Engineer |
| Kamol Khakiev | | Chief Technologist |
| Mr. Abdullaev Shavkat | Ministry of Finance of the Republic of Uzbekistan | |
| Mr. Abduganiev Bakhtiyor | State Customs Committee of the Republic of Uzbekistan | |
| Ms. Alisheva Rano | State Tax Committee of the Republic of Uzbekistan | |
| Mr. Makhmudov Mirgaybulla | Agency Uzstandart | |
| Mr. Abdujalilov Umid | Ministry of Economy of the Republic of Uzbekistan | |
| Mr. Kushnazarov Pulat | Tashkent State Technical University | |
| Mr. Nazirov Khabibulla | LLC «UzPromKholodMontaj» | |
| Mr. Asomitdinov Shakhoditdin | PE «Asomitdinov Sh.Z.» | |

**Annex 8**

## List of Documents Reviewed

Received from Istanbul Regional Hub

- 4309 Regional Prodoc UNDP for submission - as submitted
- 4309 E&S Screening Checklist signed
- Report Inception Workshop Bratislava Workshop 4-5Nov2013
- PIR-2014-GEFID4102-PIMS4309 FINAL
- 4309--2015 PIR Report
- Signed LPAC minutes
- 4309 PD REG revised after LPAC 14Feb2013
- Guidance for Conducting Midterm Reviews of UNDP-Supported GEF-Financed Projects
- ODS tracking tool 2015 (Final draft)
- UNDP GEF HCFC Project Board
- AWP gef hcfc phase out in the ceit 2016-2017-2018
- Draft Project Progress Report HCFC 4309 Regional Project CEIT June15-March16 160313
- Way forward for Project Board - Working Plan 160317
- Draft Customs Training Manual Translated Russian
- Copies of presentations at Regional Project Meeting
- Tracking Tools completed for Belarus, Tajikistan, Ukraine and Uzbekistan

Received from Belarus

- Prodoc_BLR_UNDP_HCFC_ENG
- Demo projects-summary info
- Schedule f DEMO_projects_24_12_2015 (002)
- Belarus Legislation _S Zavyalov
- HCFC Strategy_BLR_eng
- Janusz report from 2nd mission to BEL Jan 2015 EN final
- Road Map on HCFC phase-out
- Regulation on Project Steering Committee
- INCEPTION REPORT(final) ENG
- Minutes Steering Committee Decision – several
- Planning Reporting Schedule-LT_1212
- Project Board Minutes – several
- Project Organigram
- Annual Work plan 2016
- ARR 2014 signed ENG
- ARR_2013_84272_signed_Eng
- BLR input _PIMS 2015_05.08.2015
- HCFC Annual review report 2015 dated 30.12.2015)
- PIMS _june 2015 _IP and DO rating
- HCFC BLR 2013-2015Finances
- Minutes N 5 Project Board
- Several Monitoring Reports in Russian
- OPB Eng

Received from Tajikistan

- 4309 TAJ UNDP ProDoc English – final
- HCFC Tajikistan_APR_2015
- KhurshedKhusaynov_Free Cooling_UNDP Tajikistan_ 15032016
- KhurshedKhusaynov_Tajikistan report_15032016

Received from Ukraine

- Ukraine ProDoc_Eng
- Polyfoam case
- 154_contract_Polyfoam
- Project_Baord_Minutes_Oct_2015_Ozone
- Draft Minutes_Mid term Review_12.04.2016
- Draft Minutes_Mid term Review_14.04.2016
- Draft Minutes_Mid term Review_14.04.2016_MENR
- Ozone PPP for PB 09 10 2015_Eng

Received from Uzbekistan

- ProDoc_final_Eng
- Uzbekistan National Programme on ODS Phase Out_Eng
- Janusz mission report
- 1st PB Minutes and Resolution ENG 2014
- Minutes of 2nd PB of HCFC in December 2015_final_eng
- 4309--2015 PIR Report HCFC project
- Minutes of HCFC project Inception Workshop eng
- Decision of HCFC project Inception Workshop eng
- Final HCFC UZB Mutiyear Budget for MTR
- Inception Report_HCFC_UZB CO_final ENG
- Mission report of Daniel Colbourne_International Consultant
- Resolution of 2nd PB of HCFC in December 2015_final_ENG

## Annex 9

### UNEG Code of Conduct for Evaluators/Midterm Review Consultants

**Evaluators/Consultants:**

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study limitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

**MTR Consultant Agreement Form**

Agreement to abide by the Code of Conduct for Evaluation in the UN System:

Name of Consultant: Ranojoy Basu Ray

Name of Consultancy Organization (where relevant): _____

**I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.**

Signed at *Ottawa on February 11, 2016*

Signature:

**Annex 10**

**MTR Report Clearance Form**

*(to be completed by the Commissioning Unit and UNDP-GEF RTA and included in the final document)*

**Midterm Review Report Reviewed and Cleared By:**

**Commissioning Unit**

Name: _____

Signature: _____ Date: _____

**UNDP-GEF Regional Technical Advisor**

Name: _____

Signature: _____ Date: _____

**Annex 11**

***UNDP-GEF MTR Report Audit Trail***

*Note:* The following is a template for the MTR Team to show how the received comments on the draft MTR report have (or have not) been incorporated into the final MTR report. This audit trail should be included as an annex in the final MTR report.

To the comments received on the Midterm Review of *Initial Implementation of Accelerated HCFC Phase Out in the CEIT Region (Belarus, Tajikistan, Ukraine, Uzbekistan*). (UNDP Project ID-*PIMS 4309)*

*Some comments were provided in track changes to the draft Midterm Review report; they are referenced by institution ("Author" column) and track change comment number ("#" column), others were provided by hand written comments on the document or as e-mails:*

| Author | # | Para No./ comment location | Comment/Feedback on the draft MTR report | MTR team response and actions taken |
|---|---|---|---|---|
| MA (MTR/TE focal point, UNDP-GEF Unit) | 10 | Section 5.1 | Although the report states that the conclusions are integrated within the body of the report and also in Annex 1, it would still be good to include a concise summary of conclusions in Section 5.1 | Grouped |
| MA | 13 | Section 2.3a | The last sentence of this section could be expanded. Perhaps something like this: "The outputs achieved through December 31, 2015 against the planned outputs were compared and assessed to determine their contribution to the achievement of the project objectives. The MTR also: monitored project implementation and adaptive management for improving project achievements, identified threats to project sustainability, and provided recommendations on how the project should move forward." | Incorporated |
| MA | 15 | 2.3a | Is there a list of interview questions that could be included as an Annex and referenced to in the paragraph about interviews? | No. Annex 3 Draft Discussion Points for MTR were used instead |
| MA | | | The following is missing from the annexes: MTR Evaluative Matrix | Added at Annex 3 |
| MA | | | As stated in the TOR, there should be a discussion of whether or not the project is mainstreaming UNDP principles (e.g. gender equality, livelihoods promotion, income generation, etc.) or any potential | 4.2.3g. "Communications" addresses specific sustainable development and |

| | | | | |
|---|---|---|---|---|
| | | | development co-benefits of the project in this regard. I read text on gender and governance. Any other development co-benefits? | global environmental benefits that are being derived from the project |
| Selimcan Azizoglu | | Secn 5.2 | combine/regroup some of recommendations to let us address each recommendation more effectively | Changed in Executive Summary and at Secn 5.2 |
| Liudmila Tratsevskaya | | Annex 1 (Belarus) | there is no information provided on demonstration of benefits of natural cooling in Belarus | Added |
| Maksim Surkov (MS) | | Project Information Table | ProDoc signature date should list all five projects<br>Date Project Manager hired should list all 5 projects | Corrected |
| MS | | Project Information Table | GEF Financing expenditure at MTR to be confirmed by Livia Buzova | Obtained and corrected |
| MS | | Table 3 MTR Ratings Summary | Uzbekistan Pilot Destruction project cancelled | This is post mission information. Clarification obtained from Uzbekistan and text changed in appropriate places. |
| MS | | Secn 3.1 Background Context | Mention GEF IDs of the MSP and FSP project to distinguish between the two | Correction made |
| MS | | Secn 3.2 4th bullet | Add Methylal/Water based technology | Added |
| MS | | Secn 3.7 | Projects were signed at different dates. To check with IRH on what can be considered start date | All project signature dates added. Advised by Livia Buzova that The whole project is considered to be under implementation from the last prodoc signature date on, i.e. 30 July 2013. Correction added |
| MS | | Secn 4.1b - Achievability | Clarify MOU | Clarified |
| MS | | Secn 4.2.3c National Projects - Belarus | Reasons for Belarus not to proceed with ODS destruction | Clarification obtained from Belarus and text added. |
| MS | | Secn 4.2.4d | Clarify why retrofit to HFC (high GWP) is the only option | Clarification added. |
| MS | | Secn 5.2 Recommendations | Clarify why Belarus project for MAZ Kupova, company has to make payment to equipment supplier | This refers to the press that company has procured from same supplier. Clarification included |