

# **Terminal Evaluation Terms of Reference (ToR) for UNDP-supported GEF-financed project**

## **1. INTRODUCTION**

In accordance with UNDP and GEF M&E policies and procedures, all full- and medium-sized UNDP-supported GEF-financed projects are required to undergo a Terminal Evaluation (TE) at the end of the project. This Terms of Reference (ToR) sets out the expectations for the TE of the full-sized project titled *Protect human health and the environment from unintentional releases of POPs originating from incineration and open burning of health care- and electronic waste (PIMS 4567)* implemented through the Ministry of Environment. The project started on the 15<sup>th</sup> September 2015 and is in its 6<sup>th</sup> and last year of implementation. The TE process must follow the guidance outlined in the document '[Guidance for Conducting Terminal Evaluations of UNDP-Supported, GEF-Financed Projects](#)'.

## **2. PROJECT BACKGROUND AND CONTEXT**

The project was designed to prevent and reduce health and environmental risks related to persistent organic pollutants (POPs) and harmful chemicals through their release reduction achieved by provision of an integrated institutional and regulatory framework covering environmentally sound Health Care Waste and E-waste management. The project will reduce emissions of unintentional persistent organic pollutants (UPOPs) as well as other hazardous releases (e.g. mercury, lead, etc.) resulting from the unsound management, disposal and recycling of a) Health-Care Waste (HCW), in particular due to substandard incineration practice and open burning of HCW; and, b) Electronic Waste, in particular due to the practice of unsound collection and recycling activities and open burning of electronic waste. The project will achieve this by i) determining the baseline for releases of UPOPs and other hazardous substances (e.g. mercury, lead) resulting from unsound HCW and E-waste practices; ii) conducting facility assessments; iii) building capacity among key stakeholders; iv) implementing BEP at selected model hospitals, health-care facilities (HCFs) and a central treatment facility (CTF); v) introducing BAT and BEP to formal and informal E-waste processors; vi) preparing health care facilities for the use/maintenance of non-mercury devices followed by introduction of mercury-free devices; vii) evaluating facilities to ensure that they have successfully implemented BEP; viii) installing and evaluating BAT technology(ies) at one Central Treatment Facility based on a defined evaluation criteria; and, xi) enhancing national HCWM training opportunities to reach out to additional hospitals/HCFs. The project is implemented by the Ministry of Environment in collaboration with the Ministry of Health for the health care waste management component and the Ministry of Communication and Information Technology for E-Waste management component. The total budget of the GEF contribution is USD 4.1 million.

## **3. TE PURPOSE**

The overall objective of TE is to review the achievements made to deliver the specified objectives and outcomes of the project titled *Protect human health and the environment from unintentional releases of POPs originating from incineration and open burning of health care- and electronic waste (PIMS 4567)*

which is scheduled to end in September 2021. The TE will also establish the effectiveness, efficiency, relevance, performance and success of the project, including the sustainability of results and the project exit strategies. The TE will draw and analyse lessons learned through the project and best practices pertaining to the strategies employed, and implementation arrangements, which may be utilised to inform future programmes.

To achieve the objectives of TE described above, the TE evaluator will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Environmental & Social Safeguard Policy, the Project Document, project reports including Annual Project Review/PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the consultant considers useful for this evidence-based review), and summarise assessment methodologies, results, and recommendations in a report. The TE report should promote accountability and transparency and assess the extent of project accomplishments.

#### **4. TE APPROACH & METHODOLOGY**

The TE report must provide evidence-based information that is credible, reliable and useful. The TE evaluator will review all relevant sources of information including documents prepared during the preparation phase (i.e. PIF, UNDP Initiation Plan, UNDP Social and Environmental Screening Procedure/SESP), the Project Document, project reports including annual PIRs, project budget revisions, lesson learned reports, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based evaluation. The TE evaluator will review the baseline and midterm GEF focal area Core Indicators/Tracking Tools submitted to the GEF at the CEO endorsement and midterm stages and the terminal Core Indicators/Tracking Tools that must be completed before the TE field mission begins.

The TE evaluator is expected to follow a participatory and consultative approach ensuring close engagement with the Project Evaluator, government counterparts (the GEF Operational Focal Point), Implementing Partners, the UNDP Country Office the Regional Technical Advisor, direct beneficiaries and other stakeholders.

Engagement of stakeholders is vital to a successful TE. Stakeholder involvement should include interviews with stakeholders who have project responsibilities, including but not limited to; Ministry of Environment/Egyptian Environmental Affairs Agency/National Waste Management Agency, Ministry of Health, Ministry of Communication and Information Technology, CEDARE, Cairo University Hospital, Additionally, the evaluator is expected to conduct field missions within Egypt, if possible, including the following project sites in selected hospital facilities in Sharkia and Gharbia.

The specific design and methodology for the TE should emerge from consultations between the TE evaluator and the above-mentioned parties regarding what is appropriate and feasible for meeting the TE purpose and objectives and answering the evaluation questions, given limitations of budget, time and data. The TE evaluator must use gender-responsive methodologies and tools and ensure that gender equality and women's empowerment, as well as other cross-cutting issues and SDGs are incorporated into the TE report.

The final methodological approach including interview schedule, field visits and data to be used in the evaluation must be clearly outlined in the TE Inception Report and be fully discussed and agreed between UNDP, stakeholders and the TE evaluator.

The final report must describe the full TE approach taken and the rationale for the approach making explicit the underlying assumptions, challenges, strengths and weaknesses about the methods and approach of the evaluation.

## 5. DETAILED SCOPE OF THE TE

The TE will assess project performance against expectations set out in the project's Logical Framework/Results Framework (see ToR Annex A). The TE will assess results according to the criteria outlined in [the Guidance for TEs of UNDP-supported GEF-financed Projects](#).

The Findings section of the TE report will cover the topics listed below. A full outline of the TE report's content is provided in ToR Annex C.

The asterisk “(\*)” indicates criteria for which a rating is required.

### Findings

#### i. Project Design/Formulation

- National priorities and country driven-ness
- Theory of Change
- Gender equality and women's empowerment
- Social and Environmental Standards (Safeguards)
- Analysis of Results Framework: project logic and strategy, indicators
- Assumptions and Risks
- Lessons from other relevant projects (e.g. same focal area) incorporated into project design
- Planned stakeholder participation
- Linkages between project and other interventions within the sector
- Management arrangements

#### ii. Project Implementation

- Adaptive management (changes to the project design and project outputs during implementation)
- Actual stakeholder participation and partnership arrangements
- Project Finance and Co-finance
- Monitoring & Evaluation: design at entry (\*), implementation (\*), and overall assessment of M&E (\*)
- Implementing Agency (UNDP) (\*) and Executing Agency (\*), overall project oversight/implementation and execution (\*)
- Risk Management, including Social and Environmental Standards (Safeguards)

#### iii. Project Results

- Assess the achievement of outcomes against indicators by reporting on the level of progress for each objective and outcome indicator at the time of the TE and noting final achievements
- Relevance (\*), Effectiveness (\*), Efficiency (\*) and overall project outcome (\*)
- Sustainability: financial (\*), socio-political (\*), institutional framework and governance (\*), environmental (\*), overall likelihood of sustainability (\*)
- Country ownership
- Gender equality and women's empowerment
- Cross-cutting issues (poverty alleviation, improved governance, climate change mitigation and adaptation, disaster prevention and recovery, human rights, capacity development, South-South cooperation, knowledge management, volunteerism, etc., as relevant)
- GEF Additionality
- Catalytic Role / Replication Effect
- Progress to impact

#### Main Findings, Conclusions, Recommendations and Lessons Learned

- The TE evaluator will include a summary of the main findings of the TE report. Findings should be presented as statements of fact that are based on analysis of the data.
- The section on conclusions will be written in light of the findings. Conclusions should be comprehensive and balanced statements that are well substantiated by evidence and logically connected to the TE findings. They should highlight the strengths, weaknesses and results of the project, respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to project beneficiaries, UNDP and the GEF, including issues in relation to gender equality and women's empowerment.
- Recommendations should provide concrete, practical, feasible and targeted recommendations directed to the intended users of the evaluation about what actions to take and decisions to make. The recommendations should be specifically supported by the evidence and linked to the findings and conclusions around key questions addressed by the evaluation.
- The TE report should also include lessons that can be taken from the evaluation, including best practices in addressing issues relating to relevance, performance and success that can provide knowledge gained from the particular circumstance (programmatic and evaluation methods used, partnerships, financial leveraging, etc.) that are applicable to other GEF and UNDP interventions. When possible, the TE evaluator should include examples of good practices in project design and implementation.
- It is important for the conclusions, recommendations and lessons learned of the TE report to incorporate gender equality and empowerment of women.

The TE report will include an Evaluation Ratings Table, as shown below:

**ToR Table 2: Evaluation Ratings Table for**

***Protect human health and the environment from unintentional releases of POPs originating from incineration and open burning of health care- and electronic waste***

| Monitoring & Evaluation (M&E)               | Rating <sup>1</sup> |
|---|---------------------|
| M&E design at entry                         |                     |
| M&E Plan Implementation                     |                     |
| Overall Quality of M&E                      |                     |
| Implementation & Execution                  | Rating              |
| Quality of UNDP Implementation/Oversight    |                     |
| Quality of Implementing Partner Execution   |                     |
| Overall quality of Implementation/Execution |                     |
| Assessment of Outcomes                      | Rating              |
| Relevance                                   |                     |
| Effectiveness                               |                     |
| Efficiency                                  |                     |
| Overall Project Outcome Rating              |                     |
| Sustainability                              | Rating              |
| Financial resources                         |                     |
| Socio-political/economic                    |                     |
| Institutional framework and governance      |                     |
| Environmental                               |                     |
| Overall Likelihood of Sustainability        |                     |

## 6. TIMEFRAME

The total duration of the TE will be approximately *30 working days* over a time period of **3 months** starting on *15 March 2021*. The tentative TE timeframe is as follows:

| Timeframe                | Activity   |
|--------------------------|--|
| <b>N/A</b>               | Application closes   |
| <b>1 March</b>           | Selection of TE evaluator  |
| <b>15 March</b>          | Preparation period for TE evaluator (handover of documentation)                |
| <b>30 March (4 days)</b> | Document review and preparation of TE Inception Report                         |
| <b>4 April (4 days)</b>  | Finalization and Validation of TE Inception Report; latest start of TE mission |

<sup>1</sup> Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight & Execution, Relevance are rated on a 6-point scale: 6=Highly Satisfactory (HS), 5=Satisfactory (S), 4=Moderately Satisfactory (MS), 3=Moderately Unsatisfactory (MU), 2=Unsatisfactory (U), 1=Highly Unsatisfactory (HU). Sustainability is rated on a 4-point scale: 4=Likely (L), 3=Moderately Likely (ML), 2=Moderately Unlikely (MU), 1=Unlikely (U)

|                        |   |
|------------------------|---|
| 14 April days (8 days) | TE mission: stakeholder meetings, interviews, field visits, etc.                          |
| 22 April               | Mission wrap-up meeting & presentation of initial findings; earliest end of TE mission    |
| 7 May ( 11 days)       | Preparation of draft TE report  |
| 20 May                 | Collection of comments on draft TE report   |
| 27 May (3 days)        | Incorporation of comments on draft TE report into Audit Trail & finalization of TE report |
| 15 June                | Preparation and Issuance of Management Response   |
| 15 June                | Expected date of full TE completion   |

Options for site visits should be provided in the TE Inception Report.

## 7. TE DELIVERABLES

| # | Deliverable                    | Description  | Timing   | Responsibilities  |
|---|--------------------------------|--|--|---|
| 1 | TE Inception Report            | TE evaluator clarifies objectives, methodology and timing of the TE  | No later than 2 weeks before the TE mission: 30 March 2021       | TE evaluator submits Inception Report to Commissioning Unit and project management              |
| 2 | Presentation                   | Initial Findings   | End of TE mission: 22 April 2021                                 | TE evaluator presents to Commissioning Unit and project management                              |
| 3 | Draft TE Report                | Full draft report ( <i>using guidelines on report content in ToR Annex C</i> ) with annexes  | Within 3 weeks of end of TE mission: 7 May 2021                  | TE evaluator submits to Commissioning Unit; reviewed by RTA, Project Coordinating Unit, GEF OFP |
| 5 | Final TE Report* + Audit Trail | Revised final report and TE Audit trail in which the TE details how all received comments have (and have not) been addressed in the final TE report ( <i>See template in ToR Annex H</i> ) | Within 1 week of receiving comments on draft report: 27 May 2021 | TE evaluator submits both documents to the Commissioning Unit                                   |

\*All final TE reports will be quality assessed by the UNDP Independent Evaluation Office (IEO). Details of the IEO's quality assessment of decentralized evaluations can be found in Section 6 of the UNDP Evaluation Guidelines.<sup>2</sup>

<sup>2</sup> Access at: <http://web.undp.org/evaluation/guideline/section-6.shtml>

## 8. TE ARRANGEMENTS

The principal responsibility for managing the TE resides with the Commissioning Unit. The Commissioning Unit for this project's TE is the UNDP Egypt. The Commissioning Unit will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the TE evaluator. The Project Evaluator will be responsible for liaising with the TE evaluator to provide all relevant documents, set up stakeholder interviews, and arrange field visits.

## 9. TE EVALUATOR COMPOSITION

A evaluator of two independent evaluators will conduct the TE – one evaluator leader and one national consultant. The evaluator(s) cannot have participated in the project preparation, formulation and/or implementation (including the writing of the project document), must not have conducted this project's Mid-Term Review and should not have a conflict of interest with the project's related activities.

The selection of evaluators will be aimed at maximising the overall "evaluator" qualities in the following areas:

### Education

- At least a Master's degree in Environmental Management/Engineering, or other closely related field. (30%)

### Experience

- Work experience in hazardous waste management for at least 10 years; (20%)
- Relevant experience with results-based management evaluation methodologies; (5%)
- Experience applying SMART indicators and reconstructing or validating baseline scenarios; (5%)
- Competence in adaptive management, as applied to POPs (5%)
- Experience in evaluating projects; (15%)
- Experience in relevant technical areas for at least 5 years; (5%)
- Demonstrated understanding of issues related to gender and POPs; experience in gender responsive evaluation and analysis; (5%)
- Excellent communication skills; (5%)
- Project evaluation/review experience within United Nations system will be considered an asset. (5%)

### Language

- Good command of English languages is a must

## 10. EVALUATOR ETHICS

The TE evaluator will be held to the highest ethical standards and is required to sign a code of conduct upon acceptance of the assignment. This evaluation will be conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluation'. The evaluator must safeguard the rights and confidentiality of information providers, interviewees and stakeholders through measures

to ensure compliance with legal and other relevant codes governing collection of data and reporting on data. The evaluator must also ensure security of collected information before and after the evaluation and protocols to ensure anonymity and confidentiality of sources of information where that is expected. The information knowledge and data gathered in the evaluation process must also be solely used for the evaluation and not for other uses without the express authorization of UNDP and partners.

## 11. PAYMENT SCHEDULE

- 20% payment upon satisfactory delivery of the final TE Inception Report and approval by the Commissioning Unit
- 40% payment upon satisfactory delivery of the draft TE report to the Commissioning Unit
- 40% payment upon satisfactory delivery of the final TE report and approval by the Commissioning Unit and RTA (via signatures on the TE Report Clearance Form) and delivery of completed TE Audit Trail

Criteria for issuing the final payment of 40%<sup>3</sup>:

- The final TE report includes all requirements outlined in the TE TOR and is in accordance with the TE guidance.
- The final TE report is clearly written, logically organized, and is specific for this project (i.e. text has not been cut & pasted from other TE reports).
- The Audit Trail includes responses to and justification for each comment listed.

## 12. APPLICATION PROCESS<sup>4</sup>

Recommended Presentation of Proposal:

- a) **Letter of Confirmation of Interest and Availability** using the [template](#)<sup>5</sup> provided by UNDP;
- b) **CV** and a **Personal History Form** ([P11 form](#)<sup>6</sup>);
- 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)

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<sup>3</sup> The Commissioning Unit is obligated to issue payments to the TE evaluator as soon as the terms under the ToR are fulfilled. If there is an ongoing discussion regarding the quality and completeness of the final deliverables that cannot be resolved between the Commissioning Unit and the TE evaluator, the Regional M&E Advisor and Vertical Fund Directorate will be consulted. If needed, the Commissioning Unit's senior management, Procurement Services Unit and Legal Support Office will be notified as well so that a decision can be made about whether or not to withhold payment of any amounts that may be due to the evaluator(s), suspend or terminate the contract and/or remove the individual contractor from any applicable rosters. See the UNDP Individual Contract Policy for further details:

[https://popp.undp.org/\\_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP\\_POPP\\_DOCUMENT\\_LIBRARY/Public/PSU\\_Individual%20Contract\\_Individual%20Contract%20Policy.docx&action=default](https://popp.undp.org/_layouts/15/WopiFrame.aspx?sourcedoc=/UNDP_POPP_DOCUMENT_LIBRARY/Public/PSU_Individual%20Contract_Individual%20Contract%20Policy.docx&action=default)

<sup>4</sup> Engagement of evaluators should be done in line with guidelines for hiring consultants in the POPP

<https://popp.undp.org/SitePages/POPPRoot.aspx>

<sup>5</sup><https://intranet.undp.org/unit/bom/psu/Support%20documents%20on%20IC%20Guidelines/Template%20for%20Confirmation%20of%20Interest%20and%20Submission%20of%20Financial%20Proposal.docx>

<sup>6</sup> [http://www.undp.org/content/dam/undp/library/corporate/Careers/P11\\_Personal\\_history\\_form.doc](http://www.undp.org/content/dam/undp/library/corporate/Careers/P11_Personal_history_form.doc)



- d) **Financial Proposal** that indicates the all-inclusive fixed total contract price and all other travel related costs (such as flight ticket, per diem, etc), supported by a breakdown of costs, as per template attached to the [Letter of Confirmation of Interest template](#). 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.

All application materials should be submitted to the address (insert mailing address) in a sealed envelope indicating the following reference *"Consultant for Terminal Evaluation of Protect human health and the environment from unintentional releases of POPs originating from incineration and open burning of health care- and electronic waste"* Incomplete applications will be excluded from further consideration.

**Criteria for Evaluation of Proposal:** Only those applications which are responsive and compliant will be evaluated. Offers will be evaluated according to the Combined Scoring method – where the educational background and experience on similar assignments will be weighted at 70% and the price proposal will weigh as 30% of the total scoring. The applicant receiving the Highest Combined Score that has also accepted UNDP's General Terms and Conditions will be awarded the contract.

### 13. TOR ANNEXES

- ToR Annex A: Project Logical/Results Framework
- ToR Annex B: Project Information Package to be reviewed by TE evaluator
- ToR Annex C: Content of the TE report
- ToR Annex D: Evaluation Criteria Matrix template
- ToR Annex E: UNEG Code of Conduct for Evaluators
- ToR Annex F: TE Rating Scales
- ToR Annex G: TE Report Clearance Form
- ToR Annex H: TE Audit Trail

## ToR Annex A: Project Logical/Results Framework

|   |
|---|
| This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD:  |
| Country Programme Outcome Indicators:   |
| Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 1. Mainstreaming environment and energy OR<br>2. Catalyzing environmental finance OR 3. Promote climate change adaptation OR 4. Expanding access to environmental and energy services for the poor.  |
| Applicable GEF Strategic Objective and Program: Objective 1: Phase out POPs and reduce POPs releases  |
| Applicable GEF Expected Outcomes: Outcome 1.3 POPs releases to the environment reduced; Outcome 1.4 POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner; Outcome 1.5 Country capacity built to effectively phase out and reduce releases of POPs.  |
| Applicable GEF Outcome Indicators: 1.3.1. Amount of un-intentionally produced POPs releases avoided or reduced from industrial and nonindustrial sectors; measured in grams TEQ against baseline as recorded through the POPs tracking tool .Indicator 1.4.1. Amount of POPs and POPs-containing wastes disposed of, or decontaminated; measured in tons as recorded in the POPs tracking tool. Indicator 1.5.2 Progress in developing and implementing a legislative and regulatory framework for environmentally sound management of POPs, and for the sound management of chemicals in general, as recorded in the POPs tracking tool. |

|  | Indicator   | Baseline  | Targets<br>End of Project  | Source of verification  | Risks and Assumptions |
|--|---|---|--|---|-----------------------|
| Project Objective: Protect human- and environmental health by reducing releases of POPs and other hazardous releases resulting from the unsound management of waste, in particular the incineration and open burning of hazardous health care waste and electronic waste by demonstrating and promoting Best Available Techniques (BAT) and Best Environmental Practices (BEP) to soundly manage and dispose of such wastes. | Amount of U-POPs release in the environment from HCW disposal avoided.<br><br>Amount of PBDE release in the environment from E-waste disposal avoided.<br><br>Amount of emission of PTS from HCW and E-waste reduced.<br><br>Existence of a SC compliant regulatory framework on HC | U-POPs from HCWM in demonstration facilities:<br>123 g/TEQ/yr<br><br>U-POPs from E-waste sector:<br><br>U-POPs from E waste:<br>16gTeq/yr (2012)<br><br>c-PBDE from E-waste sector:<br><br>472 to 756 kg/yr from IC E-waste; 6.5 t from CRT monitors. | U-POPs from HCWM in demonstration facilities:<br>Reduction of 63.2 g/TEQ/yr<br><br>U-POPs from E-waste sector:<br><br>The proposed project will be able to reduce the amounts of UPOPs emitted from the improper treatment of E-waste by ~5 g-TEQ<br><br>Reduction of c-PBDE for an overall amount of 378 kg of c-PBDE from IC EOL equipment, plus 1513 kg c-PBDE from CRT monitors would be prevented during the project life span. | HCW segregation reports at hospital, and central treatment facilities.<br><br>Amount of plastic in HCW incinerators burnt before and after project implementation.<br><br>Sample and analysis of PCDD/F at the stack.<br><br>E-waste manifests and E-waste collection reports.<br><br>Analysis of C-PDE in plastic by means of XRF monitors<br><br>Amount of brominated plastic from E-waste properly disposed of |                       |

|   | Indicator   | Baseline  | Targets<br>End of Project   | Source of verification  | Risks and Assumptions   |
|---|---|---|---|---|---|
|   | waste and E-waste-  |   | U-POPs reduction of 3.36 gTeq /yr assuming the project would ensure the proper management of 4000 t of E-waste-   |   |   |
| <b>Component 1. HCWM: Reduction of UPOPs emissions through capacity building, introduction and demonstration of BEP and BAT and strengthening of the legislative and policy framework</b> |   |   |   |   |   |
| <b>Outcome 1.1 UPOPs emissions reduced through support to HCWM initiatives at health-care facility(ies) level, Central Treatment Facility (CTF) level and training institutions.</b>      | UPOPs releases reduced by 50% for Gharbia and by 40% for Sharkia.   | UPOPs releases from Sharkia and Gharbia combined total 143 g-TEQ/yr   | UPOPs releases reduced by 63.2 g-TEQ/yr   | <ul style="list-style-type: none"> <li>Baseline reports (incl. I-RAT reports and UPOPs and Hg release assessments), which reflect pre-project situation.</li> <li>"Measurements and Documentation56" Report which reflects pre-and post-project situation.</li> </ul> | <b>Assumption:</b> The two CTFs will be fully operational towards the end of the project, and the non-incineration technologies procured by Cairo University Hospitals will also be fully operational.<br><b>Risk:</b> Low  |
| 1.1.1: Facility assessments conducted and UPOPs baseline determined.  | Baseline assessments conducted for all project facilities   | A limited number of preselected HCFs (9) has undergone an assessment  | <ul style="list-style-type: none"> <li>I-RATs conducted for each of the project HCFs.</li> <li>UPOPs (and Hg) releases before and after project determined for each project facility (PF).</li> </ul>   | Baseline reports (incl. I-RAT reports and UPOPs and Hg release assessments).  | <b>Assumption:</b> All project HCFs are willing to participate in baseline assessments and are open to sharing information related to their current HCWM practices.<br><b>Risk:</b> Low   |
| 1.1.2 BEP implemented at project facilities (followed by evaluation).   | <p>All project HCFs (5) that will be serviced by a project CTF have introduced BEP in a satisfactory manner.</p> <p>250 HCF staff trained in BEP.</p> | The preliminary baseline assessment (I-RATs) indicated that some practices are in place but further improvements are needed related to segregation, collection, transport, storage, HCWM committees and responsibilities and meeting environmental standards. | <ul style="list-style-type: none"> <li>Memoranda of Understanding (MoUs) signed with Project Facilities.</li> <li>HCWM committees established in each PF.</li> <li>Facility specific HCWM policies, procedures and plans developed and implemented at each PF.</li> <li>PF staff trained in best HCWM practices.</li> <li>Each PF evaluated to verify introduction of BEP practices.</li> </ul> | <ul style="list-style-type: none"> <li>MOUs</li> <li>PFs HCWM plans</li> <li>Certificates of training completion and attendance sheets of training sessions.</li> <li>CTF business plans</li> <li>Blue prints for CTFs</li> <li>Evaluation report of PFs</li> </ul>   | <b>Assumption:</b> HCFs are willing to sign MOUs and the MOU signature process doesn't slow down the launch of HCF HCWM activities.<br><b>Risk:</b> Low<br><br><b>Assumption:</b> The business plans developed for the two CTFs indicate that operation of the two CTFs will be financially and operationally feasible.<br><b>Risk:</b> Low<br><br><b>Assumption:</b> Land-allocation, electricity supply, water supply, road access and necessary infrastructure provided as co- |



|  | Indicator   | Baseline   | Targets<br>End of Project  | Source of verification  | Risks and Assumptions  |
|--|---|--|--|---|--|
|  |   |  |  |   | financing by the Government of Egypt and put in place prior to procurement of the non-incineration technologies.<br><b>Risk:</b> Medium  |
| Output 1.1.3<br>Identification of technology requirements, competitive procurement, selection and installation of BAT non-incineration and incineration technology at the respective CTFs. | <ul style="list-style-type: none"> <li>Number of non-incineration technologies that are operational at CTF I and Cairo University Hospitals.</li> <li>% of HCFs in each governorate served by a CTF.</li> </ul> | <ul style="list-style-type: none"> <li>No BAT in place at any of the PFs.</li> <li>No recycling programmes in place at any of the HCFs.</li> <li>No operational maintenance schemes in place.</li> </ul> | <ul style="list-style-type: none"> <li>Technical specifications for HCW treatment technologies for CTF I and II drafted.</li> <li>Non-incineration technologies procured, installed and tested at CTF I.</li> <li>Procurement of an initial set of HCWM related supplies for the project HCFs.</li> <li>Staff trained in the operation and maintenance of the new technologies.</li> </ul> | <ul style="list-style-type: none"> <li>Photos of procured non-incineration technologies.</li> <li>Certificates of training completion and attendance sheets of training sessions.</li> <li>Signed agreements between CTFs and PFs.</li> <li>Monitoring and progress reports</li> <li>HCF visit reports</li> <li>Photos of recycling practices.</li> </ul> | <p><b>Assumption:</b><br/>Procurement of non-incineration technologies through UNDP-PSO Health and procurement of HCWM supplied doesn't run into major challenges.<br/><b>Risk:</b> Low</p> <p><b>Assumption:</b><br/>Most or all PFs are willing to enter into contracts with the CTFs for treatment of the HCW.<br/><b>Risk:</b> Low</p> |
| 1.1.4 National HCWM training opportunities enhanced to disseminate best practices to additional hospitals/HCFs.  | Number of institutions that offer HCWM training/certificate courses.  | Training programmes for waste management exist, but training programmes for HCWM need to be further improved.  | <ul style="list-style-type: none"> <li>Assessment of existing HCWM training opportunities conducted.</li> <li>National training infrastructure for HCWM established/improved.</li> </ul>   | <ul style="list-style-type: none"> <li>Copies of improved curricula/training modules.</li> <li>Certificates of ToT completion and attendance sheets of training sessions.</li> </ul>  | <p><b>Assumption:</b> The Ministry of Health and national medical training institutions are open and willing to revise the national training modules by on international best practices in HCWM training.<br/><b>Risk:</b> Medium</p>  |
| <b>Outcome 1.2. Nat. Policy and regulatory framework strengthened/dev eloped with respect to HCWM and UOPs emissions</b>   | Number of laws, regulations and guidelines pertaining to HCWM drafted/revised.  | In 2010, a HCWM strategy was finalized and adopted (April 2010). The strategy that should also include regulatory analysis update has not implemented yet.   | <ul style="list-style-type: none"> <li>Law/regulations and degrees create an enabling regulatory and policy environment for HCFs and CTFs to reduce UOPs emissions.</li> </ul>   | Draft/revision of guidelines, standards or technical regulations pertaining to HCWM available.  | <p><b>Assumption:</b> The Government of Egypt is willing to consider making necessary changes to the Environmental Law (4/1994) as well as other regulations and plans pertaining to HCWM.<br/><b>Risk:</b> Medium</p>   |
| 1.2.1 Nat. HCW policies, regulations and plans reviewed and enhanced.  | <p>Number of laws, regulations and guidelines drafted/revised.</p> <p>No of environment and health inspectors trained on revised</p>  | Same as above.   | <ul style="list-style-type: none"> <li>Assessment of the national policy, regulatory framework, and national plan governing HCWM conducted (incl. Act. 2.2.1)</li> <li>Guidelines, standards and technical regulations on HCWM revised/developed</li> </ul>  | <ul style="list-style-type: none"> <li>Copies of drafts/revisions of guidelines, standards or technical regulations pertaining to HCWM.</li> <li>Certificates of training completion and attendance sheets of training sessions.</li> </ul>   | <p><b>Assumption:</b> The Government of Egypt is supportive and willing to consider making changes to the Environmental Law (4/1994) as well as other regulations and plans pertaining to HCWM.</p>  |

|   | Indicator   | Baseline  | Targets<br>End of Project   | Source of verification  | Risks and Assumptions  |
|---|---|---|---|---|--|
|   | regulations and guidelines.   |   | following the recommendations from the national policy and regulatory assessment. Environment and health inspectors trained on revised regulations and guidelines.  |   | <b>Risk:</b> Medium  |
| <b>Component 2. HCWM: Reduction of Mercury emissions through capacity building, demonstration and introduction of mercury-free medical instruments and strengthening of the legislative/policy frameworks (in combination with component 1)</b> |   |   |   |   |  |
| <b>Outcome 2.1 Mercury emissions in HCWM sector are reduced.</b>  | Hg releases reduced by 5 kg/yr.<br><br>Kg of Mercury waste safely stored/disposed of.                           | 16.2 kg Hg/yr   | Hg releases reduced by 5 kg/yr  | <ul style="list-style-type: none"> <li>Baseline reports (incl. I-RAT reports, UOPs and Hg releases assessments), which reflect pre-project situation.</li> <li>Measurements and Documentation Report, which reflect pre-and post-project situation.</li> </ul>        | <b>Assumption:</b> Government of Egypt supports the gradual phase-out of Mercury containing medical devices.<br><b>Risk:</b> Low   |
| 2.1.1 Mercury assessments conducted and Hg baseline determined ( <i>in combination with Act. 1.1.1</i> )  | Hg Baseline assessments conducted for all project facilities  | A limited number of preselected HCFs (9), has undergone an assessment   | <ul style="list-style-type: none"> <li>I-RATs conducted for each of the project HCFs.</li> <li>Hg emissions before and after project determined for each project facility (PF).</li> </ul>  | <ul style="list-style-type: none"> <li>Baseline reports (incl. I-RAT reports and Hg / UOPs release assessments)</li> </ul>  | <b>Assumption:</b> All project HCFs are willing to participate in baseline assessments and are open to sharing information related to their current HCWM practices.<br><b>Risk:</b> Low  |
| 2.1.2 BEP related to the safe management, storage, phase-out and disposal of Mercury containing devices and wastes implemented at project facilities  | BEP related to the life-cycle management of Mercury containing medicals devices and wastes introduced in 5 PFs. | <ul style="list-style-type: none"> <li>Broken/spent Mercury containing medical devices and wastes are discarded along with municipal waste or infectious HCW and subsequently incinerated.</li> <li>No storage sites for Mercury or Medical devices containing Mercury are available in the country.</li> </ul> | <ul style="list-style-type: none"> <li>Assessment on potential Hg disposal/storage sites conducted.</li> <li>A Mercury management and phase-out plan prepared and implemented for each project facility.</li> <li>Temporary storage sites for Mercury containing wastes established at PF level.</li> <li>HCFs staff trained in the clean-up, storage and safe management (incl. transport) of Mercury wastes.</li> <li>Staff preference study for selection of Hg and PVC-free alternatives conducted in a limited number of PFs.</li> </ul> | <ul style="list-style-type: none"> <li>Certificates of training completion and attendance sheets of training sessions.</li> <li>Copy of report of staff preference study.</li> <li>Photos of temporary storage facilities for Hg containing wastes at PFs.</li> </ul> | <b>Assumption:</b> Government of Egypt supports the gradual phase-out of Mercury containing medical devices.<br><b>Risk:</b> Low<br><br><b>Assumption:</b> As co-financing, PFs allocate adequate storage space for interim Hg waste storage, and allocate staff time to participate in the staff preference study and training on the use of Hg-free alternatives.<br><b>Risk:</b> Low<br><br><b>Assumption:</b> As co-financing, governorates allocate adequate storage space for interim Hg waste storage at governorate level.<br><b>Risk:</b> Low |
| 2.1.3 Mercury free device   | <ul style="list-style-type: none"> <li>Number of Hg free</li> </ul>   | Some project HCFs already use   | <ul style="list-style-type: none"> <li>Technical specifications for</li> </ul>  | <ul style="list-style-type: none"> <li>Photos of Mercury-free devices in</li> </ul>   | <b>Assumption:</b>   |



|   | Indicator  | Baseline   | Targets<br>End of Project  | Source of verification  | Risks and Assumptions  |
|---|--|--|--|---|--|
| specifications determined, devices procured and introduced  | devices procured and distributed. <ul style="list-style-type: none"> <li>▪ Project model facilities are Mercury-free.</li> <li>▪ Kg of recovered/phased-out Mercury waste safely stored.</li> </ul>      | some Mercury-free medical devices, but none of the PFs is Mercury-free.  | Hg-free devices drawn-up. <ul style="list-style-type: none"> <li>▪ Mercury-free devices procured for project facilities (and a number of departments of CUH).</li> <li>▪ PF staff and maintenance technicians trained in the use and maintenance of Hg-free devices.</li> <li>▪ Mercury-free devices used in the project facilities.</li> <li>▪ Spent Hg-devices/waste collected and temporarily stored.</li> </ul>  | use and photos of spent/phased-out Hg containing devices. <ul style="list-style-type: none"> <li>▪ Certificates of training completion and attendance sheets of training sessions.</li> </ul>   | Procurement of Mercury-free medical devices doesn't run into major challenges.<br><b>Risk:</b> Low   |
| <b>Outcome 2.2 Nat. Policy and regulatory framework strengthened / developed with respect to sequestration, phase-out, storage and disposal of Mercury waste in HCWM sector.</b>  | Number of regulations/degrees and guidelines pertaining to Hg-containing medical products drafted/revised.   | In 2010, a HCWM strategy was finalized and adopted (April 2010). The strategy that should also include regulatory analysis update has not implemented yet. | <ul style="list-style-type: none"> <li>▪ Law/regulations and degrees create an enabling regulatory and policy environment for HCFs and CTFs to reduce Hg releases.</li> </ul>  | Draft/revision of guidelines, standards or technical regulations pertaining to Hg available.  | <b>Assumption:</b> Government of Egypt supports the gradual phase-out of Mercury containing medical devices and is willing to review, approve and adopt guidelines/regulations and degrees in support of the phase-down.<br><b>Risk:</b> Low |
| 2.2.1 Policies/guidelines on sequestration, phase-out and management of mercury waste from HCFs developed.  | Number of regulations/degrees and guidelines pertaining to Hg-containing medical products drafted/revised.<br><br>No of environment and health inspectors trained on revised regulations and guidelines. | Same as above.   | <ul style="list-style-type: none"> <li>▪ Assessment of the national policy, regulatory framework, and national plan governing Mercury conducted (in coordination with Act. 1.2.1).</li> <li>▪ Guidelines, standards and technical regulations on Mercury management revised/developed following the recommendations from the national policy and regulatory assessment.</li> <li>▪ Environment and health inspectors trained on revised regulations and guidelines.</li> </ul> | <ul style="list-style-type: none"> <li>▪ Copies of drafts/revisions of guidelines, standards or technical regulations pertaining to HCWM.</li> <li>▪ Certificates of training completion and attendance sheets of training sessions.</li> </ul> | <b>Assumption:</b> Government of Egypt supports the gradual phase-out of Mercury containing medical devices and is willing to review, approve and adopt guidelines/regulations and degrees in support of the phase-down.<br><b>Risk:</b> Low |
| <b>Component 3. E-waste: Reduction of emissions of UPOPs, and POPs through capacity building, introduction and demonstration of BEP and BAT (refurbishment and end-of-life) and strengthening of the legislative and policy framework Component</b> |  |  |  |   |  |
| <b>Outcome 3.1 Emissions of UPOPs (including new POPs) and POPs reduced through</b>   | Availability of baseline on POPs – U-POPs release.   | Few data on POPs-U-POPs release from E-waste.<br><br>Limited awareness on E-waste  | Baseline data on U-POPs and POPs released from E-waste management are available.   | Meeting minutes<br><br>Mission reports  | <b>Assumption:</b><br>The establishment of incentive scheme and rewarding mechanisms, coupled with   |

|  | Indicator   | Baseline  | Targets<br>End of Project   | Source of verification  | Risks and Assumptions   |
|--|---|---|---|---|---|
| <b>support to e- Waste Management at municipality and national level.</b>  | Availability of awareness campaigns and related feedback.<br><br>Amount of E-waste collected<br><br>Evidence of replication initiatives.  | issue.<br><br>Most of E-waste still being collected informally with harm to the environment.<br><br>No replication scheme implemented   | E-waste informal processors mapped.<br><br>Multi-media awareness campaign concluded.<br><br>At least 4,000 tons of E-waste collected and management in an environmentally sound way.<br><br>Prevention of C-PBDE release of around 1,791 kg.  | Questionnaire surveys<br><br>Project reports<br><br>Awareness raising reports / recordings<br><br>Regulatory / Policy documents.  | improvement and enforcement of the E-waste regulation will effectively promote the environmentally sound management of E-waste, hence ensuring a substantial reduction of U-POPs and POPs release in the environment.   |
| 3.1.1. National mapping of E-waste processors and refurbishers and applied practices completed and baseline on POPs and UPOPs releases from E-waste processing determined. | Availability of a completed national level characterisation study of informal WEEE processing sector<br><br>Availability of a detailed baseline of POPs and UPOPs from the E-waste management releases with trends                  | There is currently scattered information on informal WEEE processing sector.<br><br>Baselines of POPs and U-POPs from E-waste in Egypt are not available.<br><br>Preliminary figures calculated in the course of PPG based on statistical data on E-waste.  | A national level characterisation study of informal WEEE processing sector completed.<br><br>A detailed baseline of POPs and UPOPs from the E-waste management releases with trends completed.  | Questionnaire survey results.<br><br>Meeting minutes<br><br>Preliminary and final report on informal WEEE processing sector<br><br>Baseline reports on POPs and U-POPs release from E-waste management.   | <b>Risks:</b><br>1) The informal E-waste processing sector not keen to provide reliable data.<br>2) E-waste release from open burning or mismanagement emission may only be estimated indirectly<br><br><b>Assumption / countermeasures:</b><br>1) Data on E-waste informal processor will be based on direct surveys and cross check with statistical data on E-waste management.<br>2) Enough statistical data on E-waste management and EEE are available to calculate U-POPs and POPs emission by the end of the project. |
| 3.1.2 Capacity/ awareness among key among key stakeholders at national and municipal level built.  | Number of operators successfully trained on E-waste management, with specific reference to segregation of PBDE contaminated waste.<br><br>Availability of recordings of campaign broadcasted on relevant media on ICT equipment and | No capacity on the segregation of PBDE contaminated waste.<br><br>Limited campaign carried out on take-back schemes under different initiatives, mostly for mobile phones and batteries<br><br>Website on E-waste collection incentives (which however cannot only reach people connected to the web) | Specific training for the operator on the issue of POPs brominated flame retardants in waste and electronic equipment. At least 50 professionals from the public and private sector trained.<br><br>A campaign aimed at creating awareness on E-waste launched on different media (internet, TV, newspapers), providing reference and contact numbers.<br>(Establishment of a toll-free | Training report. Pre and post training assessment of the trainees. Training materials.<br><br>Recordings of awareness on E-waste and POPs broadcasted.<br><br>Website on E-waste and POPs.<br><br>Awareness raising materials.<br><br>Number of people asking information through the toll-free number or the | <b>Assumption:</b><br>The simultaneous launching of the awareness raising campaign on several media with different targets and area coverage will ensure a wide dissemination of the information on E-waste management and POPs.<br><br>Providing contact numbers / mail address will allow people to obtain further information  |



|   | Indicator   | Baseline   | Targets<br>End of Project  | Source of verification   | Risks and Assumptions   |
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|   | <p>CRT.</p> <p>Availability of a website on the above.</p> <p>Availability of awareness raising materials.</p> <p>Number of people reached by the campaign</p>  |  | line2)   | website  | and clarification, and will provide a measure of the effectiveness of campaign.   |
| 3.1.3 Introduction of BEP/BAT to priority municipalities, selected formal and informal E-waste processors/refurbishers. | <p>Number of municipalities where a collection scheme was implemented.</p> <p>Availability of E-waste collection system and infrastructures</p> <p>Amount of E-waste collected.</p> <p>Availability of a rapid screening technology for PBDE in E-waste.</p> <p>Effectiveness of the rapid screening technology (% of success</p> | <p>The largest amount of E-waste still being collected and processed by informal sector, with serious environmental consequences.</p> <p>Take back campaign limited to some E-waste categories have been carried out in the past by Mobinil and other operators under MPPI.</p> <p>A website for incentivizing E-waste recovery implemented by one firm (Recyclobekia)</p> | <p>Pilot projects on collection scheme implemented in 2 municipalities (Cairo and Alexandria).</p> <p>At least 6,000 t of WEEE of which 2,000 tons of CRT monitors will be collected during the project.</p> <p>Technology for the rapid screening of PBDE in E-waste demonstrated.</p> <p>At least 1,000 t of hazardous E-waste component disposed of in compliance with the Stockholm Convention</p> | <p>Meeting reports.</p> <p>Documentation relative to collection schemes.</p> <p>Statistics of E-waste collected through the collection scheme.</p> <p>Photo documentation, site visits, visit to the collection scheme infrastructures, interview, questionnaires.</p> | <p><b>Assumptions:</b><br/>The establishment of an incentive mechanism assisting the informal sector in its transition toward a more formal management of waste will ensure the sustainability of the collection scheme.</p> <p>Identification of a rewarding scheme for E-waste owners will increase their willingness in having their E-waste properly collected.</p> <p>Comparison of laboratory analysis with the outcome of the screening system will allow to fine tuning the technology for segregation of PBDE contaminated waste. Proof of performance test of disposal technologies will allow to confirm the destruction of POPs in E-waste.</p> |
| 3.1.4 Replication of project results at international, regional, national and municipality level                        | <p>Availability of national and international workshop proceedings.</p> <p>Availability of a replication plan.</p>  | No replication plan available for E-Waste management   | A plan for the replication of the methodologies in other Egyptian municipalities / provinces, including financial plan, timeframe, technology selection and targets developed.   | <p>National and international workshop proceedings.</p> <p>Meeting minutes.</p> <p>Draft and final replication plan.</p> <p>Agreement with African countries to</p>  | <p><b>Assumptions:</b><br/>BCRC is effective in establishing relationships with other countries with the purpose to promote the replication of the project and to extend the environmentally</p>  |



|  | Indicator   | Baseline  | Targets<br>End of Project   | Source of verification   | Risks and Assumptions  |
|--|---|---|---|--|--|
|  |   |   | With the support of Basel Convention Regional Center for Arab States (BCRC), the project will seek the collaboration of other countries to extend the replication plan to other African countries.  | extend the E-waste demonstration.  | sound E-waste management initiatives   |
| <b>3.2 National policy and regulatory framework strengthened with respect to E-waste</b>   | Availability of an improved E-waste regulatory framework  | The E-waste regulatory framework including licensing system for E-waste manager is incomplete.  | Reviewed / improved regulatory framework on E-waste fully compliant with Stockholm and Basel convention   | Official adoption documents of the regulatory framework.   | <b>Assumptions:</b><br>The selection of the proper law-making process will ensure timely adoption and enforcement of a SC compliant regulation on E-waste.   |
| 3.2.1 National policy and regulatory framework (incl rules and regulations) on E-waste management reviewed, revised and improved (pertaining to processing, refurbishing, storage, disposal, illegal trade etc.) and fully integrated into the national policy and regulatory framework for waste management.                | Availability of a reviewed or strengthened policy and regulatory framework on :<br><ul style="list-style-type: none"><li>E-waste manifest;</li><li>Licensing system for E-waste managers;</li><li>Rules on the import of second hand equipment;</li><li>Concentration limit for POPs in EEE and E-waste</li></ul> | The regulatory framework for E-waste management is incomplete, as there are no waste manifest requirements under the current law and the licensing scheme for E-waste managers is weak. This situation makes informal waste collectors and recycler unfairly competitive compared with formal waste management companies. | Reviewed / strengthened policy and regulatory framework, in compliance with the Stockholm Convention, on:<br><ul style="list-style-type: none"><li>E-waste manifest;</li><li>Licensing system for E-waste managers;</li><li>Rules on the import of second hand equipment;</li><li>Concentration limit for POPs in EEE and E-waste</li></ul> | Draft and final version of improved policies and regulation.<br><br>Meeting minutes.   | <b>Assumptions:</b><br>The selection of the proper law-making process (i.e., decrees or official guidance embedded in existing regulations) will ensure that the implementation and enforcement of an improved regulatory framework on E-waste compliant with the Basel and Stockholm convention is achieved within the project timeframe. |
| <b>Component 4. E-waste: Reduction of emissions of other hazardous substances (mercury, lead, cadmium) through capacity building, introduction and demonstration of BEP and BAT (in combination with Component 3's investments for the end-of-life management) and strengthening of the legislative and policy framework</b> |   |   |   |  |  |
| <b>Outcome 4.1 Emissions of other associated hazardous substances (mercury, lead, cadmium) reduced through support to E-waste management at municipality and national level.</b>   | Availability of baseline on release of Cd and Hg.<br><br>Availability of awareness campaigns and related feedback.<br><br>Amount of E-waste collected   | Few data on Hg and Cd release from E-waste.<br><br>Limited awareness on E-waste issue.<br><br>Most of E-waste still being collected informally with harm to the environment.  | Baseline data on Cd and Hg released from E-waste management are available.<br><br>Multi-media awareness campaign concluded.<br><br>At least 50 tons of E-waste containing PTS collected and managed in an environmentally sound way.  | Meeting minutes<br><br>Mission reports<br><br>Questionnaire surveys<br><br>Project reports<br><br>Awareness raising reports / recordings<br><br>Regulatory / Policy documents. | <b>Assumptions:</b><br>The establishment of incentive scheme and rewarding mechanisms, coupled with improvement and enforcement of the E-waste regulation will effectively promote the environmentally sound management of E-waste, hence ensuring a substantial reduction of the Hg and Cd release in the environment.                    |
| 4.1.1. Baseline on associated hazardous  | Availability of a detailed baseline of  | Few data on release of hazardous substances release   | A detailed baseline with expected trend of release of   | Baseline reports on hazardous substance release from E-waste   | <b>Assumptions:</b><br>Enough statistical data on E-   |

|   | Indicator   | Baseline   | Targets<br>End of Project   | Source of verification  | Risks and Assumptions  |
|---|---|--|---|---|--|
| releases (mercury, lead, cadmium) from E-waste processing determined (as part and parcel of Component 3).     | hazardous release from the E-waste management releases with trends, including batteries for electric/electronic devices.  | from E-waste. Most of E-waste including batteries still being collected informally or simply dumped with obvious harm for the environment.   | hazardous substances deriving from the E-waste management including batteries completed.  | management.   | waste management and EEE are available to calculate release of hazardous substances by project completion.   |
| 4.1.2 Introduction of BEP/BAT to formal and informal E-waste processors. (as part and parcel of Component 3). | <p>Number of municipalities where a collection scheme was implemented.</p> <p>Availability of E-waste collection system and infrastructures</p> <p>Amount of E-waste collected.</p> <p>Number of professional successfully trained.</p> <p>Amount of battery safely collected.</p> <p>Amount of E-waste containing hazardous material segregated and channelled to safe disposal.</p> | <p>Although projects on the collection of batteries have been implemented in the past, most EOL battery still being dumped.</p> <p>CRT monitors in most cases are dumped in landfills or open burnt as these are considered low-values</p> | <p>A pilot project for collection scheme E-waste containing PTS (i.e. mercury, lead or cadmium), built on the experience of similar projects (i.e. the Waste Mobile Battery Collection and Recycling (2005-2006) implemented, resulting in the collection of at least 10 t of E-waste.</p> <p>Training (at least 50 professionals) on classification, segregation, dismantling of EOL equipment with specific reference to component containing heavy metals.</p> <p>Demonstration on BAT/BEP technologies for the dismantling of WEEE and the segregation of hazardous component containing heavy metals (i.e. segregation of lead containing glass from CRT monitors)</p> <p>Demonstration of Environmental Safe Disposal of E-waste containing hazardous material.</p> | <p>Meeting report.</p> <p>Documentation relative to collection schemes.</p> <p>Statistics of E-waste collected through the collection scheme.</p> <p>Photo documentation, site visits, visit to the collection scheme infrastructures, interview, questionnaire.</p> <p>Training reports (pre-and post-training assessment, list of participants, training reports, training materials)</p> | <p><b>Assumptions:</b></p> <p>The establishment of an incentive mechanism assisting the informal sector in its transition toward a more formal management of waste will ensure the sustainability of the collection scheme.</p> <p>Identification of a rewarding scheme for E-waste owners will increase their willingness in having their E-waste properly collected.</p> <p>Proof of performance test of disposal technologies will allow to confirm the destruction ESM of hazardous waste.</p> |
| 4.1.3 Capacity/ awareness among key stakeholders built (as part and parcel of Component 3).                   | <p>Number of professional and operators successfully trained on E-waste management, with special reference to E-waste containing toxic metals.</p> <p>Availability of recordings of</p>   | <p>Although projects on the safe collection of batteries have been conducted in the past there is still low capacity in the collection / management of EOL batteries and CRT monitor as the recycling of this waste is not profitable.</p> | <p>Specific training for the operator on the issue of toxic metals in EOL batteries and CRT.</p> <p>At least 50 professionals from the public and private sector trained.</p> <p>A campaign aimed at creating awareness on E-waste launched on different media (internet, TV,</p>   | <p>Training report. Pre and post training assessment of the trainees. Training materials.</p> <p>Recordings of awareness on E-waste and toxic metal broadcasted.</p> <p>Website on E-waste and toxic metal.</p> <p>Awareness raising materials.</p>   | <p><b>Assumptions:</b></p> <p>The simultaneous launching of the awareness raising campaign on several media with different targets and area coverage will ensure a wide dissemination of the information on E-waste management and POPs.</p> <p>Providing contact numbers /</p>  |



|   | Indicator  | Baseline  | Targets<br>End of Project  | Source of verification  | Risks and Assumptions  |
|---|--|---|--|---|--|
|   | <p>campaign broadcasted on relevant media on EOL batteries and CRT.</p> <p>Availability of a website on the above.</p> <p>Availability of awareness raising materials.</p> <p>Number of people reached by the campaign</p>   |   | newspapers), providing reference and contact numbers.  | Number of people asking information through the toll-free number or the website             | mail address will allow people to obtain further information and clarification, and will provide a measure of the effectiveness of campaign.   |
| 4.2 National policy and regulatory framework on associated hazardous releases from E-waste processing strengthened.   | Availability of an improved E-waste regulatory framework   | The E-waste regulatory framework including licensing system for E-waste manager is incomplete.  | Reviewed / improved regulatory framework on E-waste including concentration limit of toxic metals in EEE and E-waste           | Official adoption documents of the regulatory framework.                                    | <b>Assumptions:</b><br>The selection of the proper law-making process will ensure timely adoption and enforcement of a SC compliant regulation on E-waste.   |
| 4.2.1 National policy and regulatory framework on E-waste management and recycling with respect to associated hazardous releases (mercury, lead, cadmium) reviewed/ improved (as part and parcel of Component 3). | <p>Availability of a reviewed or strengthened policy and regulatory framework on</p> <ul style="list-style-type: none"> <li>E-waste manifest;</li> <li>Licensing system for E-waste managers;</li> <li>Rules on the import of second hand equipment;</li> <li>Concentration limit for toxic metals in EEE and E-waste</li> </ul> | The regulatory framework for E-waste management is incomplete, as there are no waste manifest requirements under the current law and the licensing scheme for E-waste managers is weak. This situation makes informal waste collectors and recycler unfairly competitive compared with formal waste management companies. | In addition to what is envisaged under outcome 3.2, concentration limit for toxic metal in EEE and E-waste will be established | <p>Draft and final version of improved policies and regulation.</p> <p>Meeting minutes.</p> | <b>Assumptions:</b><br>The selection of the proper law-making process (i.e., decrees or official guidance embedded in existing regulations) will ensure that the implementation and enforcement of an improved regulatory framework on E-waste compliant with the Basel and Stockholm convention is achieved within the project timeframe. |

*The Results Framework is modified during the project implementation as included in the latest version of the PIR*

## ToR Annex B: Project Information Package to be reviewed by TE evaluator

| #  | Item (electronic versions preferred if available)  |
|----|--|
| 1  | Project Identification Form (PIF)  |
| 2  | UNDP Initiation Plan   |
| 3  | Final UNDP-GEF Project Document with all annexes   |
| 4  | CEO Endorsement Request  |
| 5  | UNDP Social and Environmental Screening Procedure (SESP) and associated management plans (if any)  |
| 6  | Inception Workshop Report  |
| 7  | Mid-Term Review report and management response to MTR recommendations  |
| 8  | All Project Implementation Reports (PIRs)  |
| 9  | Progress reports (quarterly, semi-annual or annual, with associated workplans and financial reports)   |
| 10 | Oversight mission reports  |
| 11 | Minutes of Project Board Meetings and of other meetings (i.e. Project Appraisal Committee meetings)  |
| 12 | GEF Tracking Tools (from CEO Endorsement, midterm and terminal stages)   |
| 13 | GEF/LDCF/SCCF Core Indicators (from PIF, CEO Endorsement, midterm and terminal stages); for GEF-6 and GEF-7 projects only  |
| 14 | Financial data, including actual expenditures by project outcome, including management costs, and including documentation of any significant budget revisions                                      |
| 15 | Co-financing data with expected and actual contributions broken down by type of co-financing, source, and whether the contribution is considered as investment mobilized or recurring expenditures |
| 16 | Audit reports  |
| 17 | Electronic copies of project outputs (booklets, manuals, technical reports, articles, etc.)  |
| 18 | Sample of project communications materials   |
| 19 | Summary list of formal meetings, workshops, etc. held, with date, location, topic, and number of participants  |
| 20 | Any relevant socio-economic monitoring data, such as average incomes / employment levels of stakeholders in the target area, change in revenue related to project activities                       |
| 21 | List of contracts and procurement items over ~US\$5,000 (i.e. organizations or companies contracted for project outputs, etc., except in cases of confidential information)                        |
| 22 | List of related projects/initiatives contributing to project objectives approved/started after GEF project approval (i.e. any leveraged or "catalytic" results)                                    |
| 23 | Data on relevant project website activity – e.g. number of unique visitors per month, number of page views, etc. over relevant time period, if available   |
| 24 | UNDP Country Programme Document (CPD)  |
| 25 | List/map of project sites, highlighting suggested visits   |
| 26 | List and contact details for project staff, key project stakeholders, including Project Board members, RTA, Project Evaluator members, and other partners to be consulted                          |
| 27 | Project deliverables that provide documentary evidence of achievement towards project outcomes   |

## ToR Annex C: Content of the TE report

- i. Title page
  - Title of UNDP-supported GEF-financed project
  - UNDP PIMS ID and GEF ID
  - TE timeframe and date of final TE report
  - Region and countries included in the project
  - GEF Focal Area/Strategic Program
  - Executing Agency, Implementing partner and other project partners
  - TE Evaluator members
- ii. Acknowledgements
- iii. Table of Contents
- iv. Acronyms and Abbreviations
1. Executive Summary (3-4 pages)
  - Project Information Table
  - Project Description (brief)
  - Evaluation Ratings Table
  - Concise summary of findings, conclusions and lessons learned
  - Recommendations summary table
2. Introduction (2-3 pages)
  - Purpose and objective of the TE
  - Scope
  - Methodology
  - Data Collection & Analysis
  - Ethics
  - Limitations to the evaluation
  - Structure of the TE report
3. Project Description (3-5 pages)
  - Project start and duration, including milestones
  - Development context: environmental, socio-economic, institutional, and policy factors relevant to the project objective and scope
  - Problems that the project sought to address, threats and barriers targeted
  - Immediate and development objectives of the project
  - Expected results
  - Main stakeholders: summary list
  - Theory of Change
4. Findings  
(in addition to a descriptive assessment, all criteria marked with (\*) must be given a rating<sup>7</sup>)
  - 4.1 Project Design/Formulation
    - Analysis of Results Framework: project logic and strategy, indicators

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<sup>7</sup> See ToR Annex F for rating scales.

- Assumptions and Risks
  - Lessons from other relevant projects (e.g. same focal area) incorporated into project design
  - Planned stakeholder participation
  - Linkages between project and other interventions within the sector
- 4.1 Project Implementation
- Adaptive management (changes to the project design and project outputs during implementation)
  - Actual stakeholder participation and partnership arrangements
  - Project Finance and Co-finance
  - Monitoring & Evaluation: design at entry (\*), implementation (\*), and overall assessment of M&E (\*)
  - UNDP implementation/oversight (\*) and Implementing Partner execution (\*), overall project implementation/execution (\*), coordination, and operational issues
  - Risk Management, including Social and Environmental Standards (Safeguards)
- 4.2 Project Results and Impacts
- Progress towards objective and expected outcomes (\*)
  - Relevance (\*)
  - Effectiveness (\*)
  - Efficiency (\*)
  - Overall Outcome (\*)
  - Sustainability: financial (\*), socio-economic (\*), institutional framework and governance (\*), environmental (\*), and overall likelihood (\*)
  - Country ownership
  - Gender equality and women's empowerment
  - Cross-cutting Issues
  - GEF Additionality
  - Catalytic/Replication Effect
  - Progress to Impact
5. Main Findings, Conclusions, Recommendations & Lessons
- Main Findings
  - Conclusions
  - Recommendations
  - Lessons Learned
6. Annexes
- TE ToR (excluding ToR annexes)
  - TE Mission itinerary, including summary of field visits
  - List of persons interviewed
  - List of documents reviewed
  - Evaluation Question Matrix (evaluation criteria with key questions, indicators, sources of data, and methodology)
  - Questionnaire used and summary of results
  - Co-financing tables (if not include in body of report)

- TE Rating scales
- Signed Evaluation Consultant Agreement form
- Signed UNEG Code of Conduct form
- Signed TE Report Clearance form
- *Annexed in a separate file:* TE Audit Trail
- *Annexed in a separate file:* relevant terminal GEF/LDCF/SCCF Core Indicators or Tracking Tools, as applicable

## ToR Annex D: Evaluation Criteria Matrix template

| Evaluative Criteria Questions  | Indicators   | Sources   | Methodology   |
|--|--|---|---|
| Relevance: How does the project relate to the main objectives of the GEF Focal area, and to the environment and development priorities at the local, regional and national level?                      |  |   |   |
| <i>(include evaluative questions)</i>  | <i>(i.e. relationships established, level of coherence between project design and implementation approach, specific activities conducted, quality of risk mitigation strategies, etc.)</i> | <i>(i.e. project documentation, national policies or strategies, websites, project staff, project partners, data collected throughout the TE mission, etc.)</i> | <i>(i.e. document analysis, data analysis, interviews with project staff, interviews with stakeholders, etc.)</i> |
|  |  |   |   |
|  |  |   |   |
| Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?  |  |   |   |
|  |  |   |   |
|  |  |   |   |
| Efficiency: Was the project implemented efficiently, in line with international and national norms and standards?  |  |   |   |
|  |  |   |   |
|  |  |   |   |
| Sustainability: To what extent are there financial, institutional, socio-political, and/or environmental risks to sustaining long-term project results?  |  |   |   |
|  |  |   |   |
|  |  |   |   |
| Gender equality and women's empowerment: How did the project contribute to gender equality and women's empowerment?  |  |   |   |
|  |  |   |   |
|  |  |   |   |
| Impact: Are there indications that the project has contributed to, or enabled progress toward reduced environmental stress and/or improved ecological status?  |  |   |   |
|  |  |   |   |
| <i>(Expand the table to include questions for all criteria being assessed: Monitoring &amp; Evaluation, UNDP oversight/implementation, Implementing Partner Execution, cross-cutting issues, etc.)</i> |  |   |   |



## ToR Annex E: UNEG Code of Conduct for Evaluators

Independence entails the ability to evaluate without undue influence or pressure by any party (including the hiring unit) and providing evaluators with free access to information on the evaluation subject. Independence provides legitimacy to and ensures an objective perspective on evaluations. An independent evaluation reduces the potential for conflicts of interest which might arise with self-reported ratings by those involved in the management of the project being evaluated. Independence is one of ten general principles for evaluations (together with internationally agreed principles, goals and targets: utility, credibility, impartiality, ethics, transparency, human rights and gender equality, national evaluation capacities, and professionalism).

### 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 imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.
8. Must ensure that independence of judgement is maintained, and that evaluation findings and recommendations are independently presented.
9. Must confirm that they have not been involved in designing, executing or advising on the project being evaluated and did not carry out the project's Mid-Term Review.

### Evaluation Consultant Agreement Form

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

Name of Evaluator: \_\_\_\_\_

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 \_\_\_\_\_ (Place) on \_\_\_\_\_ (Date)

Signature: \_\_\_\_\_

## ToR Annex F: TE Rating Scales

| Ratings for Outcomes, Effectiveness, Efficiency, M&E, Implementation/Oversight, Execution, Relevance  | Sustainability ratings:   |
|---|---|
| 6 = Highly Satisfactory (HS): exceeds expectations and/or no shortcomings<br>5 = Satisfactory (S): meets expectations and/or no or minor shortcomings<br>4 = Moderately Satisfactory (MS): more or less meets expectations and/or some shortcomings<br>3 = Moderately Unsatisfactory (MU): somewhat below expectations and/or significant shortcomings<br>2 = Unsatisfactory (U): substantially below expectations and/or major shortcomings<br>1 = Highly Unsatisfactory (HU): severe shortcomings<br>Unable to Assess (U/A): available information does not allow an assessment | 4 = Likely (L): negligible risks to sustainability<br>3 = Moderately Likely (ML): moderate risks to sustainability<br>2 = Moderately Unlikely (MU): significant risks to sustainability<br>1 = Unlikely (U): severe risks to sustainability<br>Unable to Assess (U/A): Unable to assess the expected incidence and magnitude of risks to sustainability |

## ToR Annex G: TE Report Clearance Form

|   |             |
|---|-------------|
| <b>Terminal Evaluation Report for (Project Title &amp; UNDP PIMS ID) Reviewed and Cleared By:</b> |             |
| <b>Commissioning Unit (M&amp;E Focal Point)</b>   |             |
| Name: _____   |             |
| Signature: _____  | Date: _____ |
| <b>Regional Technical Advisor (Nature, Climate and Energy)</b>                                    |             |
| Name: _____   |             |
| Signature: _____  | Date: _____ |

## ToR Annex H: TE Audit Trail

**To the comments received on** *(date)* **from the Terminal Evaluation of** *Protect human health and the environment from unintentional releases of POPs originating from incineration and open burning of health care- and electronic waste (PIMS 4567)*

The following comments were provided to the draft TE report; they are referenced by institution/organization (do not include the commentator's name) and track change comment number ("#" column):

| Institution/<br>Organization | # | Para No./<br>comment<br>location | Comment/Feedback on<br>the draft TE report | TE evaluator<br>response and actions taken |
|------------------------------|---|----------------------------------|--|--|
|                              |   |                                  |  |  |
|                              |   |                                  |  |  |
|                              |   |                                  |  |  |
|                              |   |                                  |  |  |
|                              |   |                                  |  |  |
|                              |   |                                  |  |  |
|                              |   |                                  |  |  |
|                              |   |                                  |  |  |
|                              |   |                                  |  |  |