REQUEST FOR MEDIUM-SIZED PROJECT APPROVAL (1-STEP PROCEDURE)

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Improve mercury management in Tunisia		
Country(ies):	Tunisia	GEF Project ID:[1]	
GEF Agency(ies):	UNIDO (select) (select)	GEF Agency Project ID:	120575
Other Executing Partner(s):	- Directorate General for the Environment and Quality of Life (DGEQV) - National Sanitary and Environmental Product Control Agency (ANCSEP) - International Centre for Environmental Technologies of Tunis (CITET)	Submission Date: Re-submission date: Re-submission date:	11/13/2014 12/12/2014 01/26/2015
GEF Focal Area(s):	Chemicals and Wastes	Project Duration (Months)	24
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐		
Name of parent program:	[if applicable]	Agency Fee ($)	57,000

A. FOCAL AREA STRATEGY FRAMEWORK AND PROGRAM[2]:

Focal Area Objectives/programs	Focal Area Outcomes	Trust Fund	(in $)	
			GEF Project Financing	Co-financing
(select) CW-2 Program 4 (select)	Reduction or elimination of anthropogenic emissions and releases of mercury to the environment	GEFTF	600,000	2,350,000
	Total project costs		600,000	2,350,000

B. PROJECT FRAMEWORK

Project Objective: Contribute to the reduction of negative mercury impacts on human health and the environment in Tunisia

Project Components	Financing Type[3]	Project Outcomes	Project Outputs	Trust Fund	(in $)	
					GEF Project Financing	Confirmed Co-financing
1. National mercury inventory, policy guidelines and laboratory capacity	TA	1. Improvements in national capacity to manage mercury containing waste and comply with the Minamata Convention	1.1 National mercury inventory developed 1.2 Gap analysis of the current regulatory and institutional framework related to the management of mercury containing waste in Tunisia 1.3 Enhanced laboratory capacity to analyse mercury 1.4 Awareness raising and knowledge transfer	GEFTF	265,455	300,000
2.Complementary site assessment including determination of mercury pollution total depth and impact on downstream agricultural plain, and sanitary risk evaluation of	TA	2. SNCPA remediation plan improved by complementary information collected during the project	2.1 Complementary site assessment (total depth of pollution and impact on agricultural plain) based on previous investigations conducted 2.2 Sanitary risk	GEFTF	250,000	2,000,000

[1] Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.
[2] When completing Table A, refer to the excerpts on *GEF 6 Results Frameworks for GETF, LDCF and SCCF*.
[3] Financing type can be either investment or technical assistance.

National Society of Cellulose and Paper Alfa (SNCPA)			evaluation conducted			
3. Monitoring and evalution	TA	3. Project achieves objective on time through effective monitoring and evaluation	3.1 Indicators designed and project impact evaluated	GEFTF	30,000	50,000
			Subtotal		545,455	2,350,000
			Project Management Cost (PMC)[4]	GEFTF	54,545	
			Total project costs		600,000	2,350,000

If Multi-Trust Fund project :PMC in this table should be the total and enter trust fund PMC breakdown here ( )

[4] For GEF Project Financing up to $2 million, PMC could be up to10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

C. SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include confirmed co-financing letters for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
Recipient Government	State Secretariat for Sustainable Development under Ministry of Environment (USD1,477,600 from DGEQV, USD39,000 from CITET, USD23,400 from ANPE)	In-kind	1,540,000
Recipient Government	Ministry of Public Health	In-kind	260,000
Private Sector	SNCPA	In-kind	500,000
GEF Agency	UNIDO	Grants	50,000
Total Co-financing			2,350,000

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee a) (b)	Total (c)=a+b
UNIDO	GEF TF	Tunisia	Chemicals and Wastes	Mercury	600,000	57,000	657,000
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total Grant Resources					600,000	57,000	657,000

a) Refer to the Fee Policy for GEF Partner Agencies.

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[5]

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	*ha*
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	*ha*
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	Number of freshwater basins
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	Percent of fisheries, by volume
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO_{2e} mitigated (include both direct and indirect)	metric tons
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	*metric tons*
	Reduction of 1000 tons of Mercury	*metric tons*
	Phase-out of 303.44 tons of ODP (HCFC)	*ODP tons*
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	Number of Countries:
	Functional environmental information systems are established to support decision-making in at least 10 countries	Number of Countries:

Note: Chlor-alkali to membrane technology transfer already took place in Tunisia. The project will focus on remediation of a mercury contaminated site and prevention of further mercury contamination. Mercury will probably be recovered from the contaminated site, but the quantity of mercury can only be estimated after completing further site investigations planned under the project.

F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

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

[5] Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

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PART II: PROJECT JUSTIFICATION

A. PROJECT OVERVIEW

A.1. *Project Description.* Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental cost reasoning and expected contributions from the baseline, the GEFTF, LDCF/SCCF and co-financing; 5) global environmental benefits (GEFTF), and adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed;

Mercury (Hg) is one of the most harmful environmental pollutants used today in industrial processes. As it possesses unique chemical and physical characteristics, mercury has been widely used in a range of industrial and chemical engineering applications such as silver and gold amalgamation, plating technologies and chlor alkali processes. Mercury containing compounds are also present in dental amalgams, laboratory and medical devices, and energy efficient light bulbs. Mercury exists in three chemical forms (elemental, methyl mercury, and additional inorganic and organic species), each with specific effects on human health capable of causing malfunction of the central nervous system with severe physiological responses. Despite its wide use, mercury presents a number of environmental and public health risks as methyl mercury is capable of crossing the brain and placental barriers with devastating effects on cognitive function and foetal development in humans. Mercury poisoning is most commonly associated with elevated levels of methyl mercury in freshwater and marine fish, made famous after the tragic number of mercury related deaths observed in the fishing village of Minamata in Japan in the late 1950s.

Due to its toxicity, persistence, long range mobility, and tendency to bioaccumulate in wildlife, recent attention has been focused on mercury as a global pollutant. In response to growing international concerns about the long term ecological and health effects of mercury in the global environment, the United Nations Environment Program (UNEP) formalized the Global Mercury Partnership in 2008, which UNIDO is leading the small scale gold mining sector and actively participating in several other sectors, to safeguard human health and the global environment from the release of mercury and its compounds. Started in 2009, negotiations for the preparation of a legally binding global instrument on mercury to safeguard human and ecosystem health were successfully completed in January 2013 with 147 governments (including Tunisia) agreeing on the draft text for the Convention on mercury. At the Conference of Plenipotentiaries held from 9 to 11 October 2013 in Minamata and Kumamoto, Japan, the "Minamata Convention on Mercury" was formally adopted and opened for signature. Tunisia became signatory to treaty in October 2013.

2) The baseline scenario or any associated baseline projects;

Baseline scenario

Mercury situation in Tunisia

Except the National Society of Cellulose and Paper Alfa (SNCPA) site described in the paragraphs below, there is very limited information on the presence, sources, and quantity of mercury used and emitted in Tunisia from other sectors. No mercury inventory was ever carried out at the country level.

History of SNCPA

As a result of using mercury-cell technology for 36 years (1962-1998) to produce chlorine, SNCPA, adjacent to the city of Kasserine, capital of Kasserine Province, is currently a hotspot for mercury contamination. The SNCPA, a publicly owned company with an industrial purpose, contributed to the economic development of Kasserine, the poorest yet a priority region of Tunisia by producing chlorine that is essential for the production of paper. The plant has, since 1998, converted to the environmentally friendly membrane technology for its chlorine production, and the former mercury cell unit was left

abandoned as illustrated on Figure 1.

Figure 1. (Top) Former Chlor-alkali unit with mercury cells still containing large quantities of mercury on the 1st floor and (Bottom) abandoned tanks and pipes adjacent to the Former Chlor-alkali unit.

Due to accidental spills, chronic leakages and poor management, mercury from the plant has been released through multiple exposure pathways: the gutter and the drainage ditch inside the plant, two streams (aka wadis or oueds) [Oued Andlou and Oued El Htab] as well as to groundwater through the porous soil of the entire facility and of the streams. Land uses surrounding the plant are mainly housing and agricultural plains. Due to population growth and city expansion, the plant is now no longer at the edge of the city boundary but rather part of the city, directly affecting the communities nearby and downstream from the plant. Figure 2 depicts the location of the SNCPA site and illustrate the

development of the city of Kasserine.

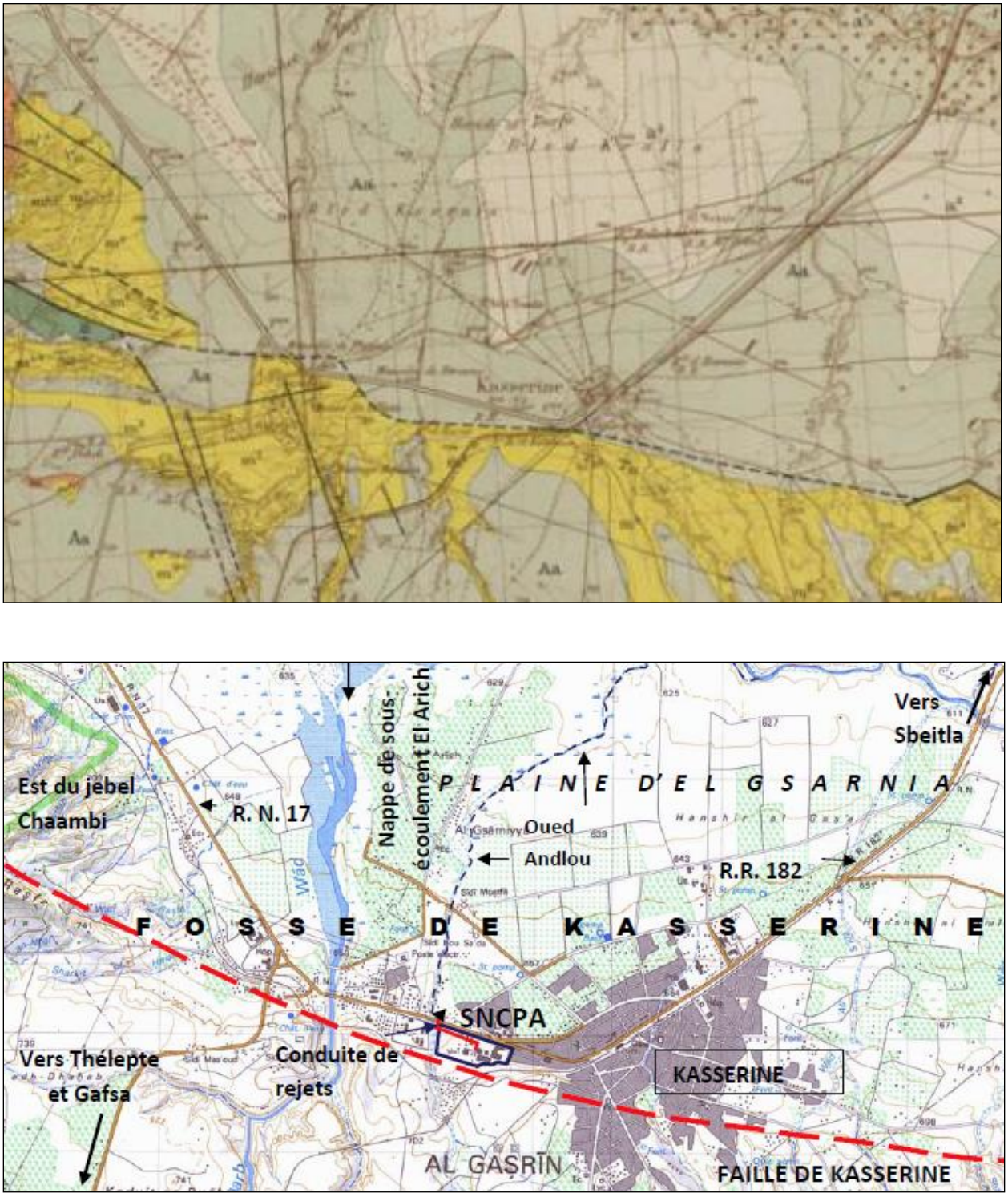


Figure 2. (Top) Geological map showing the city of Kasserine in 1948 and (Bottom) recent map of the city of Kasserine and location of SNCPA, both maps extracted from GEREP report (2008).

Chlor-alkali process

In the chlor alkali process, chlorine is produced by two reactions. During the first reaction, electrolyze

occurs between a saturated brine and a mercury bath acting as cathode to produce an amalgam of sodium and mercury, and chlorine. In the second reaction, the amalgam reacts in a decomposer with water to produce hydrogen and caustic soda (refer to Figure 3 below). The mercury is then returned to the first step of the process and reused. Byproducts of the reaction are caustic soda and hydrogen.

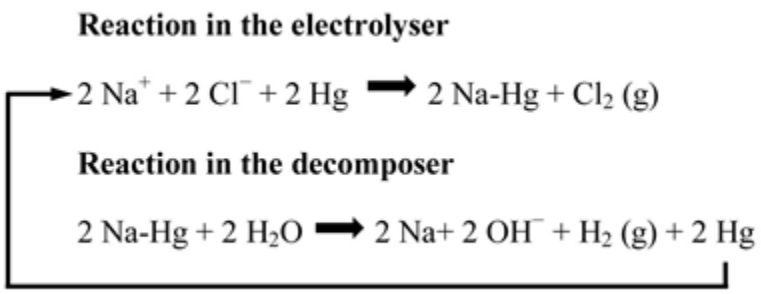


Figure 3. Reactions occurring in the mercury cell unit for the production of chlorine

Previous characterization and site assessment of mercury release at SNCPA – Source of contamination

It is estimated that the SNCPA released approximately 16,000 m3 of wastewater per day during its chlor-alkali operations between 1962 and 1998. Wastewater, contaminated by mercury through leakage of the mercury cell units, was released towards the Oued Andlou, which flows into the Oued El Htab (a larger wadi north of the city) and feeds the shallow Al Alrich aquifer through its porous stream bed.

Following the conversion to membrane technology in 1998, a total of three technical investigations were conducted at SNCPA:

a) 1998: by O'Connors Associates (Canadian consulting company) on behalf of SNCPA

b) 2005: by AMEC (Canadian consulting company) with funds from the Canadian International Development Agency

c) 2009 and 2010: by GEREP (Tunisian consulting company) on behalf of the Ministry of Environment

Each investigation built on the results obtained from the previous one. The GEREP assessment is thus the most complete report.

The first study was initiated in 1998 by the SNCPA due to its environmental concerns related to mercury pollution. It was conducted by the company O'Connors Associates Environmental Inc. The report concluded that: (i) mercury concentrations in the collected sediments and water from the SNCPA gutters exceed the international standards of the Canadian Council of Ministers of the Environment (CCME); (ii) the mercury cell unit is still a main source of contamination, and (iii) mercury losses to the environment via the wadi Oued Andlou occurred due to leakages or accidents. According to O'Connors et al. (1998), up to 300 tons of mercury was released to the environment from which 5 to 8 tons are still in the mercury cell unit.

Based on the results of the first study, a second study was conducted in 2005 by AMEC (Earth and Environmental) consulting company and supported by the Canadian International Development Agency (CIDA). This study characterized the mercury pollution of the site, evaluated the impact of mercury contamination on environment and on human health and recommended the optimum decontamination scenario. In particular, it concluded that: (i) contents in soils of the decommissioned mercury cell unit exceed the Canadian threshold fixed by the CCME for industrial soils, (ii) the impact of the contamination affected the soil to a depth of almost 5 m, (iii) sediments of the Oued Andlou, conveying the SNCPA wastewaters are also contaminated, (iv) the Al Alrich aquifer is contaminated with mercury contents higher than the recommended maximum by the CCME for fresh water consumption. Vegetable samples were not contaminated. However, some soil samples taken in the surroundings of wells were

highly contaminated.

In 2009 (Phase I) and 2010 (Phase II), the Tunisian Ministry of Environment and Sustainable Development (MEDD) commissioned GEREP, an environment consulting company, for the evaluation of mercury pollution and the identification of decontamination solutions. This study has characterized mercury pollution inside and outside the plant based on the results from the two previous studies and complementary sampling and analyses. A survey combined with observation provided evidences that there has been mercury leakage of the system during and after the operation of the mercury cell unit.

In sum, it is estimated that the SNCPA emitted to the environment approximately 8-12 tons/year of mercury from 1962 to 1998 summing to approximately 300 tons. The mercury cell unit is still on site, represents a high contamination risk to the local population and the environment. A wastewater treatment plant (WWTP) was initially constructed to treat the effluents from the SNCPA. However, it was decommissioned only after two years of operation, because it was inefficient and not adapted to the wastewater of the plant. The site of the WWTP is also currently contaminated with mercury, especially the remaining sludge. The locations of the SNCPA, WWTP, and the wadis are depicted on Figure 4.

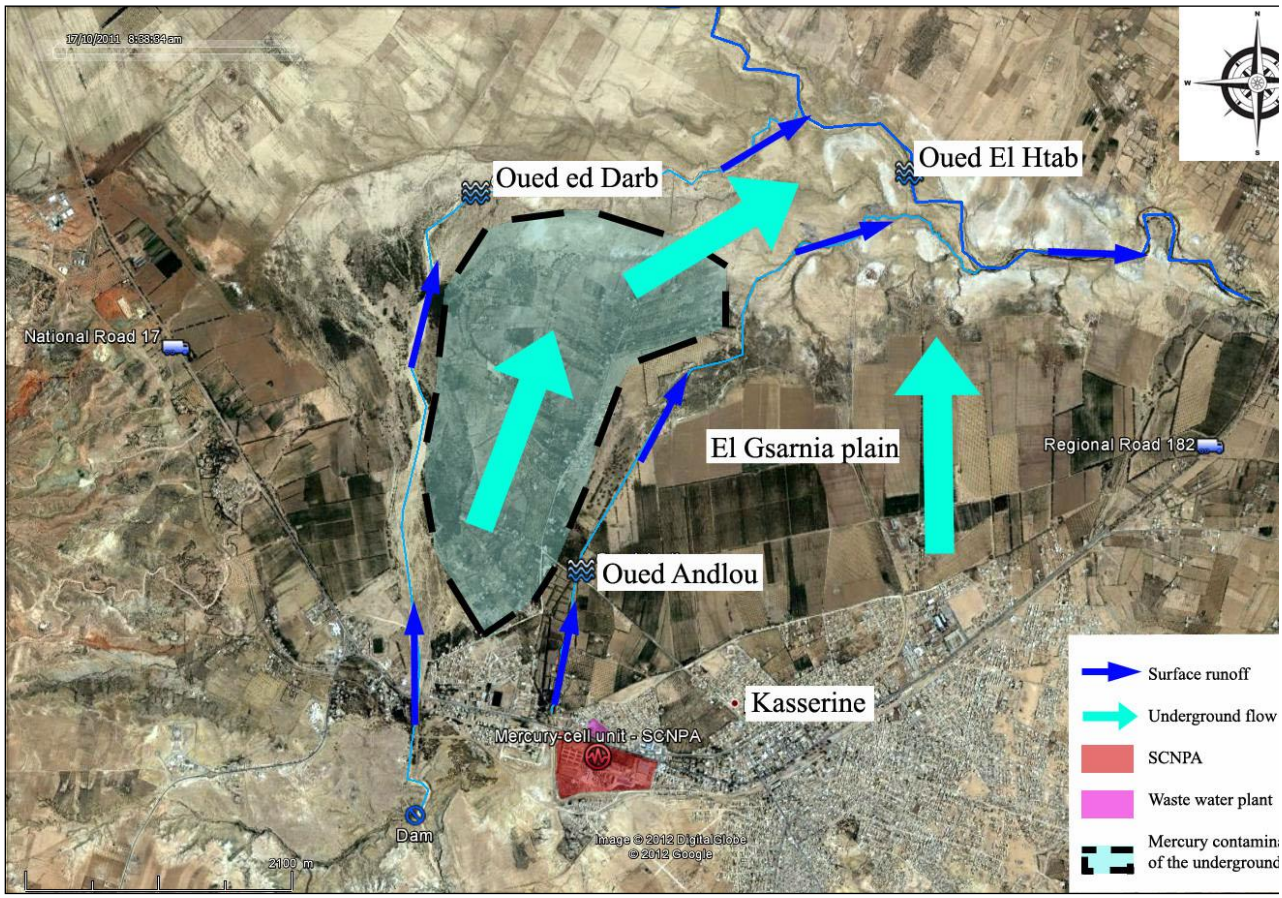


Figure 4. Air photograph of the Kasserine region, showing the SNCPA and the wastewater treatment plant (WWTP) sites and the Al Alrich shallow aquifer contaminated by mercury (modified from Google Earth).

Within the plant, three zones have been identified:

(i) Highly contaminated zone: where the mercury cell unit is located and the area of the decommissioned wastewater treatment plant

(ii) Moderately contaminated zone: covering a radius of approximately 100 m around the area of the mercury cell unit

(iii) Low contaminated zone: corresponding to the rest of the SNCPA plant

Mercury spills were found in many places throughout the plant. Samples from scrap metals containing mercury yielded levels at approximately 1000 mg/kg. Soils underneath the mercury cell unit were found to be contaminated by mercury at least down to 5 m where the concentration was as high as 284 mg/kg, for a natural abundance in the Earth crust estimated at 0.05 mg/kg (Global Mercury Assessment, UNEP, 2002) and a regulatory limit value for the topsoil of industrial site of 50 mg/kg (Canadian Council of Ministers of the Environment, 2002). Finally, groundwater extracted from the same location had mercury content up to 23 μg/l for a regulatory limit value of 1 μg/l (Canadian Council of Ministers of the Environment, 2002).

The soil quantity that needs to be decontaminated from the plant includes the area where the mercury cell unit is located, the soil from the gutter and the drainage ditch and the soil of the wastewater treatment plant. It represents a total volume to be extracted of approximately 68,400 m3, and a volume of 82,000 m3 to be disposed after expansion.

The subsoil of the mercury cell unit is constituted of sandstones and clay layers. Part of it has been dissolved by leakages of basic and acid products from the SNCPA chlor-alkali operations that have formed cavities in the substratum, which may have accelerated the extension of the mercury contamination through preferential pathways.

The wadis - Exposure paths

The two wadis “Oued Andlou” and “Oued ed Darb” are two tributaries of the “Oued El Htab”. The Oued Andlou directly receives wastewater discharges from the SNCPA site. The Oued ed Darb presents a perennial water flow at the barrage upstream from the SNCPA site and serves as a water reservoir for irrigation of the El Gsarnia plain during the low water period (April to September). Therefore the barrage actually disconnects the Oued ed Darb water flow from the Oued El Htab. The Oued El Htab has also a perennial water flow of which approximately 1/3 is alimented by the SNCPA wastewater. It was estimated that about 43% of the wastewater discharged by the SNCPA is lost either by evaporation or infiltration to the Al Alrich aquifer before reaching the Oued El Htab.

The El Gsarnia alluvial plain - Receptor

The geological basement of the El Gsarnia plain north of Kasserine constitutes sands and calcareous, where two aquifers are separated by clay layers. The water table of the shallow Al Alrich aquifer is approximately at 3 8 m below ground surface and is directly connected to the Oued Andlou and therefore highly vulnerable to pollution from the SNCPA site. It represents a water reservoir and in the past, it was used by 120 irrigation wells. This aquifer is separated from the deeper, confined and multilayered aquifer situated at more than 100 m below ground surface. It is situated below the Al Alrich aquifer and separated by a 40 50 m clay layer. Twenty wells extract water from the deeper aquifer. The water table level of the deep aquifer is continuously lowering due to the overexploitation of the water resource, reinforcing the risk of contamination from the overlaying contaminated Al Alrich aquifer.

Soils of the surroundings of the SNCPA and the El Gsarnia Plain are mainly used for agriculture. Previous assessments showed that soils of this area are contaminated with mercury. The discharged wastewater is rich in chloride ions and hypochloride that could potentially react with the mercury already present in the water to form mercury (II) chloride (HgCl) a very soluble form that allow mercury to rapidly circulate downwards and reach the aquifers.

Baseline project

National capacity

From a legislation point of view and since signing the Basel Convention in 1995, the Ministry of Environment of Tunisia developed a set of laws and decrees addressing industrial waste management such as:

- Law No. 96-41 (1996, amended 2001) on waste management including control and disposal, and the

implementation of adequate disposal facilities;

- Decree 2339 (2000) which established a list of national hazardous waste chemicals; and,

- Decision to establish processing unit and hazardous waste transfer centers (2006) in Jradou, Bizerte, Sfax, and Gabès, with a total capacity of 150,000 tons per year.

In addition, Tunisia signed the Stockholm Convention on persistent organic pollutants in 2001 and ratified it through a Presidential Decree in 2004.

These legal documents were developed without any consideration for mercury and need thus to be assessed and compared with the requirement of the Minamata Convention. Amendments will have to be developed and submitted to the government.

Awareness on the risks related to mercury exposure is very low in Tunisia. Laboratory capacity to analyse mercury is also close to non-existent. Furthermore, only one site is identified as a source of mercury releases. A national inventory needs to be conducted to identify and quantify other sources of mercury releases in Tunisia.

SNCPA contaminated site

Concerning only mercury contaminated site currently identified in Tunisia and based on three previous investigations of the SNCPA site in Kasserine, the remediation scenario (Annex E) proposed by the GEREP company includes four phases: 1) securing the facilities; 2) dismantling of the installations and building; 3) mercury contaminated soil remediation, and 4) rehabilitation of the site. Operationally, these four phases will be subdivided in specific group of activities that will ensure the protection of the workers and neighboring community's health as well as the protection of the environment from any additional mercury pollution. This remediation approach was endorsed by the main local and national stakeholders and in consultation with the Ministries of Agriculture, Environment, Equipment, Finance, Health, Industry, and Interior).

In agreement with the approved SNCPA remediation plan, the Tunisian government has recently initiated an international bidding process for the first phase (securing the facilities) of the remedial activities with internal funding from the Ministry of Environment. The deadline for submitting proposals was set at 23 September 2013. With limited financial resources available, the Tunisian government managed to set aside USD 600,000 to cover the costs of this first set of activities of the SNCPA remediation plan. The activities related to the securing of the former mercury cell units are expected to start in 2014.

Bidding documents and plans for the second, third and fourth phases were drafted and reviewed by an international expert with support from the German International Cooperation, GIZ. Funding for these phases of the remediation plan still need to be identified; the Tunisian government is actively seeking support from the international community.

For the third phase of the remedial plan dedicated to soil decontamination, the stakeholder committee that review the remediation plan selected a scenario, where the contaminated metallic structure of the buildings will be treated abroad by Low Temperature Thermal Desorption while the contaminated soil (mercury concentration higher than 50 mg/kg) will be stabilized and landfilled in a hazardous waste landfill to be constructed on the SNCPA site. The overall remediation cost for the soil decontamination is estimated at about 37 Mio Tunisian dinars (approximately $USD 22.3 Million). However, prior to executing the activities under this phase, complementary investigations are necessary to determine (i) the total depth of the mercury contamination below the abandoned mercury cell unit and (ii) the impact of mercury releases on the Al Arich aquifer, down-gradient from SNCPA site. The Al Arich aquifer is used for the irrigation of the overlaying agricultural plain. In addition, a sanitary evaluation of SNCPA's employees and neighbors as well as the flora and fauna surrounding the plant has yet to be conducted. Based on these two studies, the Tunisian government will gain a complete view of the mercury contamination, including associated risks, amount of soil that require excavation, landfill construction engineering details, and a total cost estimation.

Following the remediation of the SNCPA contaminated site, a residual risk assessment will be conducted

in the fourth phase of the remediation plan and regular monitoring of mercury concentration in sediments, soils, surface water and groundwater will be organized, as part of the rehabilitation plan.

UNIDO could have a key role to play during the remediation of the SNCPA site by providing expertise on contaminated site management and monitoring of remediation activities. In particular, UNIDO's competencies could be very valuable during the third phase of the remedial plan (soil decontamination) when pollution prevention during the extraction activities as well as health and safety of the workers must be ensured. The identification of Low Temperature Thermal Desorption facilities could also be facilitated. Subsequently, the fourth phase of the remediation plan (residual risk assessment) could be designed by UNIDO.

3) The proposed alternative scenario, with a brief description of expected outcomes and components of the project;

Project components

As mentioned here above, no regulatory framework (such as national inventory and management guidelines) or experience exists in country to properly manage mercury and mercury containing waste. Therefore, the Tunisian government has requested UNIDO's assistance in developing a national mercury inventory as their first step in complying with the upcoming Minamata Convention as well as GEF's guidelines on mercury to be published in the fourth quarter of 2013. In addition, the Tunisian government initiated the execution of the first phase of the SNCPA remedial plan developed by GEREP consulting company. However and despite the soundness of the previous investigations, some uncertainties remain on the extent and severity of the mercury contamination in Kasserine. Additional investigations to complement the previous ones and fully characterize the extent of mercury pollution onsite and downstream are needed. Therefore, as part of the proposed project, technical support to facilitate the complementary investigation process will be provided by UNIDO. In sum, UNIDO will act as a facilitator to build national capacity and organize the transfer of knowledge and equipment on mercury management, including monitoring and analysis, to Tunisia. UNIDO and the Tunisian government are requesting GEF's assistance to fund a project with the following components: (i) developing a national inventory of mercury sources, conducting a gap analysis of the regulatory and institutional framework, enhancing the laboratory capacity to analyse mercury and raising the awareness on risks associated with mercury, (ii) conducting a complementary assessment of previous investigations at the SNCPA site and in the downstream alluvial plain, including additional soil and water samples as deemed necessary and a sanitary risk evaluation based on biological samples.

Specifically, the project will strengthen national and local capacity to effectively manage and reduce mercury containing waste by:

1. Developing a national mercury inventory, conducting a gap analysis of the regulatory and institutional framework, enhancing the laboratory capacity to analyse mercury, and raising awareness on risks related to mercury in Tunisia:

National mercury inventory:

The national mercury inventory will be conducted based on UNEP's "Toolkit for identification and quantification of mercury releases". It is intended to assist Tunisia in developing a mercury releases inventory. In agreement with the governement of Tunisia, the project will aim to reach inventory level 2, corresponding to a comprehensive inventory. Mercury source release data will enhance discussion, goal-definition and identify areas that require additional assistance. Recommendations incuding prioritization of the mercury sources will be included in the inventory report. Data from the inventory will be used beyond project completion to develop regulatory instruments for environmentally sound management of mercury and be fully integrated into national and local decision-making processes. The inclusion of a final storage space for stabilized mercury in the existing national hazardous waste facilities in country will be evaluated.

Gap analysis of the current regulatory and institutional framework related to the management of mercury containing waste in Tunisia:

The existing regulatory and institutional framework will be reviewed and improvements suggested based on the requirements of the Minamata Convention and the GEF guidelines to be published in the fourth quarter of 2014.

Enhanced laboratory capacity to analyse mercury:

The analytical capacity of the Centre International des Technologies de l'Environnement de Tunis (CITET) laboratory will be enhanced by providing specific training on portable equipment to be purchased by the project. The equipment foreseen is a portable Zeeman mercury analyzer RA-915M by Lumex (brief description available in annex F) or equivalent. It is planned to purchase also the optional equipment for the liquid and solid analysis.

Awareness raising and knowledge transfer:

The awareness of the Tunisian will be increased through information campaigns and organization of workshops for key target groups such as population potentially exposed to mercury or dentists using mercury containing amalgams.Particular importance will be given to women and children that are more vulnerable due to physiological specificities that increase the risk of developmental and birth defects. It is foreseen to organize workshops at the national level, but also in localities where mercury emissions will be identified during the national mercury inventory. At the national level, workshop will be addressed to government officials, policy makers and academics or representatives of specific sectors such as dentists while at the local level, population potentially affected, local authorities and CSOs will be invited to participate. Particular emphasis will be given to women and children participation as they are more sensitive to mercury pollution. The involvement of academia and CSO will be encourage in order to increase the sustainablity of the knowledge transferred. Technical workshops focusing on mercury contaminated site management and decontamination techniques will also be organized for government officials, academics and private sector representatives active in environment assessment and remediation. In terms of number of trainings/workshops, at the design stage a total of at least four events is planned (national level: one general workshop, one specific trainnig for dentists, and one for investigation and remediation of mercury contaminated sites; local level: Kasserine). This number will be reevaluated after the completion of national mercury inventory. In addition, material describing the risks associated with mercury will be developed and distributed in parallel to the project in events organized by the Ministry of Environment and the Ministry of Health.

2. Complementary assessment of the SNCPA site focusing on the mercury cell unit, the downgradient aquifer, and a sanitary risk evaluation:

Complementary assessment of the SNCPA site:

Under this component, complementary soil and groundwater samples will be collected and analysed in complement to the past investigations undertaken at the SNCPA site and down- gradient in the Al Arich plain. The determination of the mercury contamination depth below the abandoned mercury cell unit and the level of contamination of the Al Arich aquifer down-gradient from SNCPA will be specially emphasized. Uncertainties on the severity of the Al Arich plain and aquifer contamination will be reduced by increasing the frequency of surface- and ground-water sampling in order to capture potential mercury peaks related to rainfall events.

Sanitary evaluation:

Furthermore, a sanitary risk evaluation will be conducted in the region starting with the collection of hair, blood and/or urine samples of workers at the SNCPA plant, neighboring communities in the vicinity and downstream from Oued Andlou. The vegetation as well as local fauna will also be analysed to provide a concrete picture of the mercury related risks for the Kasserine population. The sanitary evaluation will be complemented by an awareness raising campaign to be conducted with the support of the Ministry of Health.

Based on the results of these two studies, the remediation plan proposed by GEREP in 2010 to address both environmental and human health concerns will be updated and the remediation costs revised accordingly. The goal of this component is to provide the government of Tunisia with a complete view of the mercury contamination and associated risks at the SNCPA site.

The logical intervention is summarized in annex A and the timeline of the outputs in annex B. Co-financing per output is presented in annex C.

Considering the amount of resources that have already been spent at investigating the SNCPA site and a strong political will to reduce the impacts of mercury on human health and the environment, sound mercury management is definitely a high priority on Tunisian's environmental agenda. The regulatory and institutional framework that will be assessed and the improvement suggestions that will be made by the project will give the tools to prevent potential future mercury releases similar to the ones that happened at the SNCPA site. Implementation of the abovementioned project components and activities directly support the GEF 5 chemicals strategy to initiate work on mercury and mitigate environmental and human health risks through sound chemical management in developing countries such as Tunisia.

The complementary assessments to be undertaken under component 2 are essential to (i) get a full picture of the mercury contamination caused by SNCPA, and (ii) correctly estimate the volume of contaminated soil and the related treatment cost. Currently, SNCPA, a privately operated facility, is facing economic difficulties and have neither the resources, nor the technical knowledge to assess and clean-up its contamination. The technical and sanitary investigations will thus have a major impact on the financially and technically much larger remediation plan that the Government of Tunisia is committed to implement in Kasserine after identifying funding sources.

4) Incremental cost reasoning and expected contributions from the baseline, the GEFTF, LDCF/SCCF and co-financing;

Although the main project stakeholders are aware of the negative impact of mercury's use, emissions and releases on the environment, the country lacks technical capacity and knowledge as well as institutional and policy framework to prevent and remediate mercury pollution. The lack of information on the presence, sources, and quantity of mercury used and emitted in Tunisia makes prioritization of sectors for intervention difficult and evaluation nearly impossible. With the GEF's support, pollution sources can be identified systematically to select areas for intervention while institutional capacity needs and policy analysis will assist to identify potential barriers to implementation and ratification.

The proposed project will have a catalytic effect in providing the legal and institutional frameworks to support country to comply with obligations of the Minamata Convention. The conversion from chlor-alkali to membrane technology already performed by the SNCPA significantly reduced the quantity of mercury used in Tunisia. The proposed project and the associated GEF's resources will provide technical support to facilitate the complementary investigation process necessary to conclude the SNCPA remedial plan initiated by the Tunisian government. .

5) Global environmental benefits (GEFTF), and adaptation benefits (LDCF/SCCF);

Direct benefits

As mercury is a recognized global pollutant subject to the recently finalized legally binding agreement, it is a critical time for Tunisia to take proactive measures and set a strong precedent for environmental management and regulatory compliance. Because mercury is a chemical element, once it is released, it will remain in the environment indefinitely, affecting organisms far away from the emission point. The Government of Tunisia will directly benefit from the project, by increasing its compliance with the requirements of the Minamata Convention. Another direct beneficiaries will be the Tunisian population through its enhance awareness on the risks posed by mercury exposure.

Indirect benefits

Although estimations of quantitative mercury reductions are difficult to do at this point in time, based on the three prior technical investigations conducted in Kasserine, it is estimated that more than 300 tons of mercury were released. Currently, 5 to 8 tons of metallic mercury are still present in the mercury cells of SNCPA. Furthermore, approximately 82,000 m3 of contaminated soil will have to be extracted and decontaminated during the clean-up of the SNCPA site. In this perspective, the present project will indirectly have a significant impact on the much larger remediation plan, a project currently estimated to cost more than USD 22.3 Mio. The funds invested by the GEF in this project will help clarify the extent and severity of the mercury contamination, enabling thus the Tunisian government to refine its remediation plan. Based on this comprehensive view of the situation, and after donor support is secured, the remediation of the mercury contamination at the SNCAP facility will enable the safe removal and stabilization of significant quantities of mercury, generating major global environmental benefits.

The results of this project may also contribute to the replication of good practices and cross cutting initiatives to promote the sound management of hazardous chemicals with local, regional and global benefits.

6) Innovativeness, sustainability and potential for scaling up:

In Tunisia, there is growing awareness of sophisticated technical solutions for the reduction of ecological and human health risks through treatment of contaminated soils, surface and groundwater but little technical expertise exist specifically for mercury.

The development of national mercury inventory and guidelines will assist in prioritizing mercury sources, treatment, and disposal of mercury containing waste. These regulatory tools will also provide the policy framework to sustain the efforts made during the project and ensure the long term environmentally sound management of mercury in Tunisia.

A.2. *Stakeholders* Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes ☒ /no☐) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation:
The main project stakeholders and their roles are described here after. Firstly, the stakeholders who will be actively involved in the implementation of the project through subcontracts are presented:
- Directorate General for the Environment and Quality of Life (Direction Générale de l'Environnement et de la Qualité de la Vie - DGEQV)
DGEQV, as the main governmental counterpart, will be the focal point for the project from the government's side and will be the major executing entity;
- National Sanitary and Environmental Product Control Agency under the Ministry of Health (Agence nationale de contrôle sanitaire et environnemental des produits - ANCSEP)
ANCSEP will be in charge of the sanitary evaluation of the SNCPA employees, neighbors or the plant as well as the areas surrounding the plant. As the government agency in charge of the sanitary and environmental control of products, ANCESP has the authority and experience to conduct sanitary evaluation in Tunisia. ANCSEP will focus on biological samples from human, vegetation and fauna. ANCSEP's intervention will also include information and awareness raising activities; and,
- International Centre for Environmental Technologies of Tunis (Centre International des Technologies de l'Environnement de Tunis - CITET)
As a reference centre under the Ministry of Environment, CITET has the capacity and experience to conduct environmental assessments. Its experts will conduct soil and water sampling surveys to (i) assess the total depth of mercury contamination below the former chlor-alkali unit of the SNCPA and assess the severity of the mercury contamination of the Al Arich agricultural plain. In absence of certified laboratory center for mercury analysis in Tunisia, the samples will be sent abroad for laboratory analysis.

In addition to the key project partners mentioned above, the following project stakeholders will be consulted and informed of the project activities:
- National Society of Cellulose and Paper Alfa (Société nationale de cellulose et papier alfa - SNCPA)
SNCPA was identified by the Ministry of Environment as the only major mercury contaminated site in Tunisia. Similarly to the preparation phase, SNCPA will be an active and committed partner during the implementation of the project;
- National Waste Management Agency (Agence nationale de gestion de déchets - ANGED)
ANGED is responsible for waste management and will be consulted in priority throughout the project for all mercury waste management related aspects; and,
- National Environmental Protection Agency (Agence nationale de protection de l'environnement - ANPE)
ANPE is the institution responsible for environmental protection and will, similarly to ANGED, be consulted in priority throughout the project for all environmental related aspects.
The six above entities will all be represented in the Steering Committee of the project. The later will be completed by:
- Water Resources Department of the Ministry of Agriculture (Direction générale des ressources en eau - DGRE) ;
- Local Department of Regional Agricultural Development in Kasserine (Commissariat de développement régional agricole à Kasserine - CDRA) ;
- MASSARE, a civil society association active in Kasserine. MASSARE supports micro enterprises to improve the wellbeing of the local population, lobbies for the creation of green recreational spaces and sport infrastructure in poor neighborhoods, promotes sustainable development, and does volunteering in hospitals and local administration; and,
- Ministry of Industry (Ministère de l'industrie) as the line ministry of SNCPA.

A.3. Gender Consideration. Are gender considerations taken into account? (yes ☒ /no☐). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.
Gender mainstreaming will be included from the design of this project and will be based on GEF's Policy on Gender Mainstreaming and UNIDO's gender policy, mainly by involving women and vulnerable groups at the sector and stakeholder levels. The proposed regulatory reform and establishment of national strategic plan on sound mercury management can benefit all Tunisians, but will offer particular advantages to women and children who often bear the burden of mercury poisoning. Intervention at historical mercury contamination sites, such as the SNCPA site, can generate specific benefits for women and children due to physiological specificities that increase the risk of developmental and birth defects. Statistically, women make up about 30% of the total labor force in the Kasserine region. Women dominate the harvesting of the Alpha raw material as well as harvesting agricultural crops in the local region. Females are also dominant harvesters for private olive groves. In addition to agricultural harvesting, many women are also observed to raise livestock in Kasserine. These activities place women at a greater exposure risk to mercury contamination, especially activities near the Oued Andlou. As a consequence, reducing environmental and human health risks at the SNCPA site will (i) increase the sustainability of rural and traditional livelihoods by making a positive contribution to local agricultural and animal husbandry sectors adversely affected by the legacy of the SNCPA mercury release and (ii) deliver household benefits by reducing mercury exposure risks, specifically to women and children.

Based on health and livelihood concerns, it is very important to design a sanitary risk evaluation plan with targeted messaging for female audiences and provide specific information to increase women's awareness of the health risks associated with mercury exposure. In a broader sense, the promotion of women's involvement through socially inclusive and gender sensitive models of engagement in this project not only respect the differential risks to mercury poisoning in Tunisia but could help women have a stronger voice at local and nations levels. The implementation of project activities will not only protect women's health, but also likely improve the productivity of the specific sectors in which women are currently employed, thus enhancing their employability and wage earning capacity.

In addition, special attention will be paid to gender equality when evaluating and inviting members to participate to the National Steering Group and attending trainings as well as the awareness workshops. Time and location of these events will be adapted to different gender groups' needs and cultural traditions. The training material will be adapted to the audience and gender sensitized, taking into account local specificities. To the extent possible, female candidates will be encouraged to apply during recruitment process and given preference when presenting technical qualifications similar to those of men.

A.4. *Benefits.* Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF).

At the national level, the proposed project will generate benefits through the reduction and/or elimination of mercury limiting mercury risks on human health and the environment; and protected ecosystems and their goods and services.

In Kasserine, where the SNCPA company used and released large quantities of mercury over a long period, the project will raise awareness on the risks associated with mercury. Besides serious intoxication caused by mercury release and emission, the population exposed to mercury is more likely to get sick from other diseases, be chronically ill and have physical and mental disabilities. Consequently, the quality of life decreases, as well as the labor productivity, while the public health care costs increase. As mentioned above, women make up about 30% of the total labor force in the Kasserine region and dominate the harvesting of the Alpha raw material as well as harvesting agricultural crops in the local region, placing them at a greater exposure risk to mercury contamination. The project will thus be particularly beneficial for the women and younger generation in Kasserine, reducing exposure to mercury. Furthermore, the mercury remedation to be initiated based on the results of this project will reduce the quantity of mercury in the local environment and due to the specificities of mercury (long distance travel through air and water, meaning thatlocal release from anthropogenic sources extend risks to human well-being and ecosystem health well beyond the point of origin) will also have a positive global environmental impact.

A.5 *Risks.* Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks:

Risk	**Level**	**Mitigation measure**
Political unwillingness to adopt regulatory reforms through parliament	Low	UNIDO has collaborated previously with relevant government ministries on ozone depleting substances and clean production projects. The goals of the proposed project directly align with current hazardous waste and chemical management objectives in country. In addition, as a sign of its commitment to reduce the negative impact of mercury, the Government of Tunisia will be represented by its Minister of Environment during the diplomatic conference in Minamata to sign the Convention in October 2013.
Political instability	Medium/high	UNIDO, along with its field office located in Tunis, will monitor the political situation in country closely and adjust project activities accordingly
Extreme weather events due to climate change	Low	The project will monitor the quality of the *Al Arich* aquifer during a complete hydrological cycle. Should an extreme weather event such as unusually heavy rainfall events happen, the sampling programme will be adapted to ensure the safety of the field technicians and the representativeness of the samples

A.6. *Cost Effectiveness*. Explain how cost-effectiveness is reflected in the project design:
The project is based on two complementary dimensions, namely national capacity and mercury contaminated site characterization. The capacity component will include the development of a national mercury inventory and the assessment of regulatory and institutional frameworks and suggest improvements where needed to ensure the long term sustainability of the project's objective. Data from the national inventory will be used beyond project completion to develop regulatory instruments for environmentally sound management of mercury and be fully integrated into national and local decision-making processes. The enhanced laboratory capacity will be used for all mercury related assessments and monitoring in the future. However, due to the limited duration of the project, the certification of laboratories for mercury analysis will be outside of the project's scope.
The site characterization component will include a complementary assessment of the SNCPA site and a sanitary risk evaluation that will remove the current uncertainties on the severity of the mercury contamination in Kasserine. The results of these investigations will provide a complete view of the mercury contamination and associated risks at the site in order for the government of Tunisia to adapt if needed and proceed then with the remedial plan of the SNCPA contaminated site.
The combination of capacity building at the national level with concrete activities in the major mercury hot-spot in Tunisia will ensure that GEF's funding is effectively used to (i) efficiently reduce the direct threat from the SNCPA site to the human health and the environment and (ii) orient Tunisia with initial tools towards the environmentally sound management of mercury.

A.7. *Coordination.* Outline the coordination with other relevant GEF-financed projects and other initiatives [not mentioned in A.1]:

Awareness about the toxicity of mercury has significantly grown in the past several years. The United Nations Environment Program (UNEP) leads the international community in developing the legally binding instrument to control this toxic substance. The project will closely follow the recommendations of the legally binding agreement on mercury particularly on the development and finalization of national strategic action plans. In 2008, UNEP also formed the Global Mercury Partnership to address issues holistically and share experience from previous and current projects in order to eliminate duplication of effort and improve efficiency. This project will benefit from the partnership and vice versa, through sharing of information and experience, especially of projects conducted in this region and others. The partnership also represents a large network of experts, many of whom are from low and middle-income countries who can both lend expertise to the project, and gain from it.

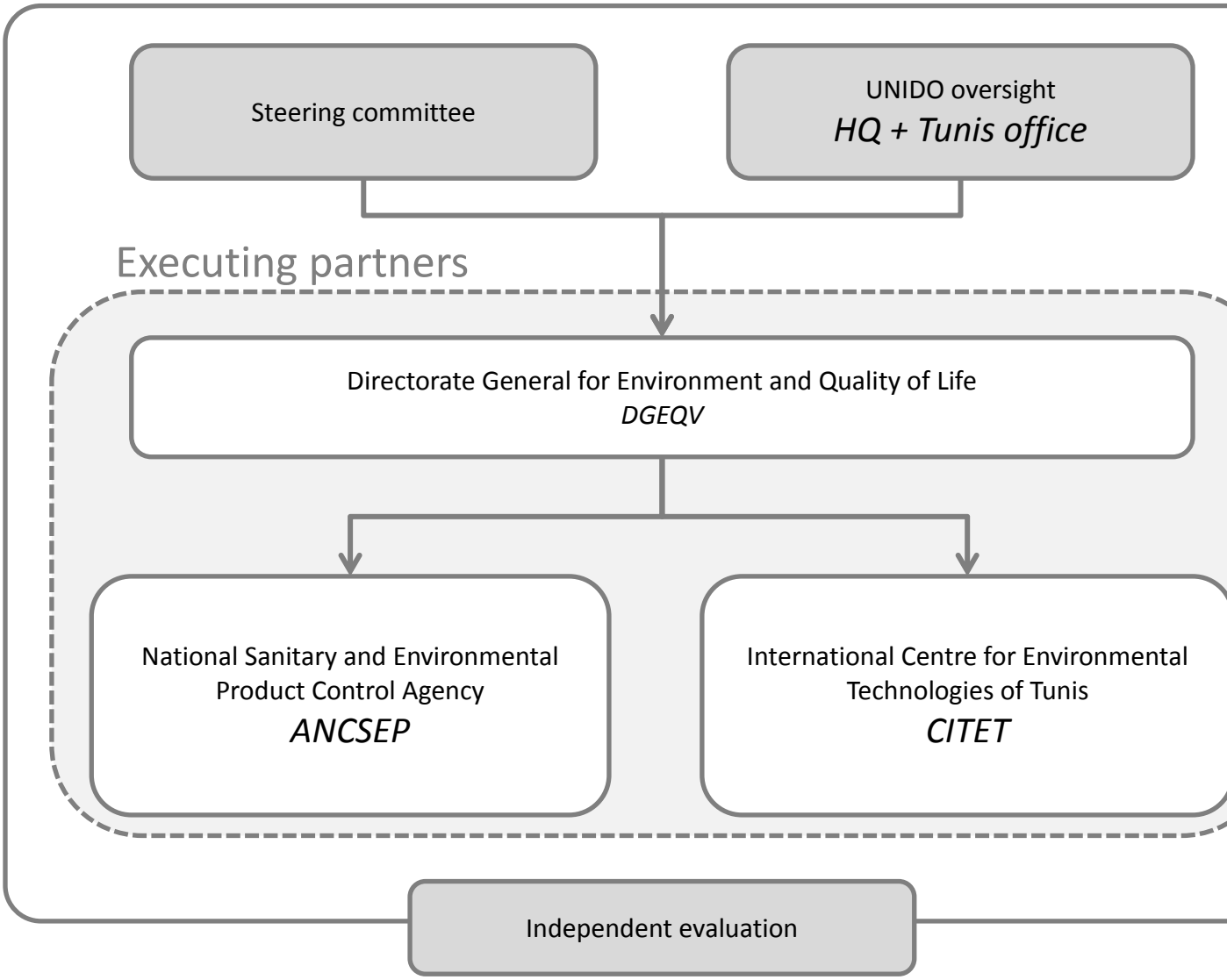
Finally, this project is also complimentary to the overarching Strategic Approach to International Chemicals Management (SAICM) policy framework to promote chemical safety around the world. Application of SAICM principals are capable of finding key leverage points for intervention by reducing mercury related risks, governance, capacity-building and technical cooperation, knowledge and information sharing, and reducing trans-boundary mercury movements. This project will strengthen Tunisia's capacity to soundly manage mercury containing waste.

Furthermore, Tunisia is part of UNEP's global En.lighten project for efficient lighting for developing and emerging countries. The project activities in Tunisia started in early 2013 with an inventory at the national level and the development of a strategy for the period 2013-2016. During the implementation of the strategy, the project will set up a collection scheme for mercury containing efficient bulbs. An E-waste recycling facility, under development with support from the Korean International Development Agency (KOICA), is planned for the

recycling of mercury containing efficient bulbs. An initial meeting with the subcontractor in charge of the En.lighten project in Tunisia took place in August 2013 to ensure good coordination between the En.lighten project and the proposed mercury project. As a result of the meeting, the design of this project ensures that any overlaps between the two projects are minimized. Communication channels between the two initiatives will be established at project inception and maintained throughout project implementation.

A.8 *Institutional Arrangement.* Describe the institutional arrangement for project implementation:
This project will be implemented by one GEF agency, UNIDO. However, the project will coordinate closely with UNEP and its ongoing mercury initiatives such as the Global Mercury Partnership. In coordination with UNEP, UNIDO will support assimilation of the global legally binding instrument on mercury into national policy for the sound management of mercury containing wastes and promote full integration of technical guidelines for the management of wastes consisting of elemental mercury and wastes containing or contaminated with mercury under the Basel and Rotterdam Conventions.
At the national level, the National Waste Management Agency, ANGED, will be the main counterpart. Decision concerning the project activities and budget as well as approval of technical and progress reports will be taken by a Steering Committee constituted of the project's main stakeholders as described under A.2.
Project implementation arrangement
UNIDO will be the GEF implementing agency and will be responsible for overall project oversight. UNIDO will also play a key coordinating role between ongoing initiatives with UNEP and other mercury projects in the region and globally.
Day-to-day activities will be under the responsibility of DGEQV, Tunisia's Directorate General for Environment and Quality of Life. A dedicated team, composed of a national coordinator and a project assistant, will be recruited by the project and manage on the ground activities.

Based on a stakeholder consultation held on 20 August 2013 (Minutes presented in annex G), the most suitable approach for the execution of the project based on the country current condition is the issuance of two subcontracts for the complementary investigation and sanitary evaluation of the SNCPA to CITET and ANCSEP respectively.
All procurement activities will be made in line with UNIDO's rules and administrative procedures. In particular, UNIDO adopts the following principles that shall be given due consideration when undertaking the procurement function: (i) Best value for money; (ii) Fairness, integrity and transparency of the procurement process; (iii) Effective competition.
The following diagram illustrates the planned project implementation arrangement:



B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Is the project consistent with the National strategies and plans or reports and assessements under relevant conventions? (yes ☒ /no☐). If yes, which ones and how: NAPAs, NAPs, NBSAPs, ASGM NAPs, MIAs, NCs, TNAs, NCSA, NIPs, PRSPs, NPFE, BURs, etc.

Tunisia has a diverse economy, with agricultural, mining, energy, tourism, and manufacturing sectors. Government control of economic affairs has gradually lessened over the past decade with increasing privatization and simplification of the tax structure. Tunisia is also gradually removing trade barriers with the European Union. Of particularly interest to the Kasserine region, the value of the pulp and paper commodities have been on the rise, hence the SNCPA plant acting as an important component of the local economy. Therefore, the mercury contamination at the SNCPA has extended additional economical pressure not only based on the impacts related to agricultural crop production and livestock raising, but also the effects on human health and the environment which are closely linked with productivity, income, and employment.

Realizing chemicals management as a top priority on the environmental agenda and recognizing the need for intergovernmental cooperation to mitigate the ecological and health threats associated with hazardous substances, Tunisia became a signatory of the Basel

Convention on the control of transboundary movements of hazardous wastes and their disposal in 1995 and entered into force in 1996. Since that time, the Ministry of Environment has developed a program through the passing of several major decisions, laws, and decrees on industrial waste management, including:

-Law No. 96-41 (1996, amended 2001) on waste management including control and disposal, and the implementation of adequate disposal facilities.

-Decree 2339 (2000) which established a list of national hazardous waste chemicals.

- Decision to establish processing unit and hazardous waste transfer centers (2006) in Jradou, Bizerte, Sfax, and Gabès, with a total capacity of 150,000 tons per year.

In addition, Tunisia signed the Stockholm Convention on persistent organic pollutants in 2001 and ratified it through a Presidential Decree in 2004. A NIP was developed in 2006 and is currently under review and update.

Due to the poor management and oversight at the SNCPA site, significant mercury contamination continues to impact the community and the environment in Kasserine. As the use, emission sources, transport and public health risks associated with mercury and mercury containing wastes remain relatively unknown in Tunisia, it is difficult to design specific collection, treatment, and disposal practices within the existing hazardous waste management system in country. Through the international negotiating process on the Minamata Convention, mercury has attracted political attention on the national hazardous and chemical management agenda in Tunisia.

B.2. GEF focal area[6] and/or fund(s) strategies, eligibility criteria and priorities

The proposed project is directly in line with the GEF 6 Chemicals And Waste Focal Area, "to promote the sound management of chemicals throughout their lifecycle in ways that lead to the minimization of significant adverse effects on human health and the environment" and in particular Program 4 "reduction or elimination of anthropogenic emissions and releases of mercury to the Environment" of the Objective 2 to "reduce the prevalence of harmful chemicals and waste." This project will support the GEF Chemicals And Waste Focal Area by strengthening local and national capacity to effectively manage and reduce mercury emissions and exposure in Tunisia.

Consistent with prior GEF approaches to chemical programming and strategic focusing of resources for mercury management schemes, the proposed project will build upon and make a real contribution in strengthening Tunisia's foundational capacities for sound chemical management, promote pollution prevention approaches, and employ a lifecycle approach to minimize adverse effects of mercury on human health, while extending benefits to the global environment.

B.3 The GEF Agency's program (reflected in documents such as UNDAF, CAS, etc.) and Agencies comparative advantage for implementing this project:

UNIDO's mandate is to promote the eradication of poverty through the promotion of sustainable productive activities. The organization is committed to introducing technological solutions in an integrated manner to address issues that adversely affect human health and the environment. UNIDO has experience in chemical management projects such as ozone depleting substances and clean production programs in different regions of the world, including Tunisia. Previous experience gained from capacity building for environmentally sound management of ozone depleting substances and establishment of clean production centre have established a strong rapport with international, national and local stakeholders, which increases UNIDO's ability to successfully act as the implementing agency and collaborate with the main executing partners proposed in this project. In terms of mercury, UNIDO has been, along with the Natural Resource Defense Council (NRDC), leading the Artisanal and Small-scale Gold Mining (ASGM) sector of the Global Mercury Partnership and currently implementing projects in West Africa, Latin America and Asia. While UNIDO has mainly demonstrated past experience in the

[6] For biodiversity projects, please describe which Aichi Target(s) the project will directly contribute to and what indicators will be used to track progress towards achieving these specific Aichi target(s).

ASGM area (over 20 years and in 17 countries), it also acts as an active partner in the mercury in products, mercury in waste, chlor-alkali sectors and even in the non-ferrous metals sector, which is currently not a partnership area. Therefore, UNIDO has the capacity and experience to mobilize its partners at national, regional and international levels, including members from the Global Mercury Partnership, to ensure collaboration in this project. In these various areas, UNIDO's role is to provide technical guidance based on its experience working with the industrial sectors and mainstreaming sound chemical management in developing and emerging economies like Tunisia.

C. DESCRIBE THE BUDGETED M &E PLAN:

Monitoring and evaluation (M&E) for this project will rely on several levels of review, quality control and feedback. Indicative M&E work-plan and budget are presented in Annex C.

Overall M&E: UNIDO will be responsible for overall project oversight, and reporting progress to the donor. UNIDO will conduct annual supervision visits to the project site within Tunisia. A project steering committee including the main project's stakeholders will meet annually to 1) review and approve annual work plans; 2) assess progress against M&E targets as indicated in the project results framework; 3) approve of interim and final reports; and 4) assess any gaps or weaknesses, and make appropriate adaptive management decisions based on progress and achievements. Work plan for year two will be based upon results achieved in the first year, including associated budget allocations, in agreement with GEF and UNIDO's rule and regulations. UNIDO's Tunisia field office will assist and participate in monitoring and evaluation visits as needed. The final evaluation, to be conducted by an independent local evaluator, will be arranged by and reports submitted to the donor within 90 days of project end. The terms of reference for the local evaluator will be developed with support from the UNIDO project manager under guidance from UNIDO's evaluation group. A budget of usd 30,000 is allocated for evaluation and monitoring purposes. An indicative workplan and budget for monitoring and evaluation is presented in Annex C.

Programmatic M&E: the main executing partners, the directorate general for the environment and quality of life (DGEQV) under the ministry of environment, will be responsible for day-to-day management and execution of the project, reporting twice per year to UNIDO. In addition to managing on the ground activities, DGEQV will conduct two monitoring and evaluation visits to the project site each year to review and assess project progress, ensure management decisions are implemented, review strategies and adapt project execution plans accordingly.

Progress of activities and outputs against the targets and desired outcomes will be assessed bi-annually by the executing partners using the means of verification and impact indicators for measurement explained in the project results framework.

Financial monitoring: all project costs will be accounted for and documented. Financial reports will be required from the executing agency according to standard UNIDO accounting procedures. UNIDO will in turn provide expense reports to the GEF on an annual basis through the regular reporting done at the organization level. In the same regard, UNIDO will submit the yearly progress implementation report (PIR) to the GEF. A final programmatic and financial report will be submitted to the GEF within 90 days of the project end.

According to the monitoring and evaluation policy of the GEF and UNIDO, follow-up studies like country portfolio evaluations and thematic evaluations can be initiated and conducted. All project partners and contractors are obliged to (i) make available studies, reports and other documentation related to the project and (ii) facilitate interviews with staff involved in the project activities.

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

A. Record of Endorsement[7] of GEF Operational Focal Point (S) on Behalf of the Government(S): (Please attach the *Operational Focal Point endorsement letter(s)* with this template. For SGP, use this SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Sabria BNOUNI	Director for International Cooperation and Partnership	**MINISTRY OF ENVIRONMENT**	**20/01/2015**

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies[8] and procedures and meets the GEF criteria for MSP approval under GEF-6.

Agency Coordinator, Agency name	Signature	DATE *(MM/dd/yyyy)*	Project Contact Person	Telephone	Email Address
Philippe R. Scholtès, Managing Director, Programme Development and Technical Cooperation Division (PTC) UNIDO GEF Focal Point		01/26/2015	Jerome Stucki, Environmental Management Branch	+43 1 26026 3559	J.Stucki@unido.org

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION *(Applicable Only to newly accredited GEF Project Agencies)*

For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to the PIF.

[7] For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.
[8] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

HIERARCHY OF OBJECTIVES	Indicators	Sources of verification	Assumptions
Project Development Objective: Contribute to the reduction of negative mercury impacts on human health and the environment in Tunisia	- Extent to which mercury management is improved in country (score 0 to 4)	Final evaluation report	
NATIONAL CAPACITY			
Outcome 1. Improvements in national capacity to manage mercury containing waste and comply with the Minamata Convention	- # of technical documents finalized and submitted to government	Public records	- Stakeholders are able and willing to adopt and learn new procedures and/or requirements to manage mercury containing waste - Political stability in the Kasserine region
Output 1.1. National mercury inventory developed	- % of mercury sources identified and quantified based on UNEP toolkit	Progress report	
Output 1.2. Gap analysis of the current regulatory and institutional framework related to the management of mercury containing waste in Tunisia	- # of legislative text reviewed	Public records	
Output 1.3. Enhanced laboratory capacity to analyse mercury	- Delivery confirmation of mercury detecting equipment - # experts trained on new equipment (gender disaggregated)	Progress report and self-evaluation report	
Output 1.4. Awareness raising and knowledge transfer	- # participants sensitized (gender disaggregated)	Project progress and self-evaluation report	
COMPLEMENTARY ASSESSMENT			
Outcome 2. SNCPA remediation plan improved by complementary information collected during the project	- # of technical reports drafted during the project that are contributing to the final remedial plan	Remediation plan	- Continued support and consensus from stakeholders - Political stability in the Kasserine region
Output 2.1 Complementary site assessment based on previous investigations conducted	- # of soil and water analysis performed	Project progress report and self-evaluation report	
Output 2.2 Sanitary risk evaluation conducted	- # of biologic samples analyzed - # of SNCPA workers and neighboring community members sensitized (gender disaggregated)	Project progress report and self-evaluation report	

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

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

ANNEX C: M&E INDICATIVE WORK-PLAN AND BUDGET

Type of M&E activity	Responsible Parties	Budget USD*	Time frame
Inception Workshop	Project Manager (PM)	3,000 (workshop costs only)	Within first two months of project start up
Inception Report	Main Executing Entity (MEE) PM	0	Immediately following the Inception Workshop
M&E design and collection of data (performance indicators)	PM will oversee the hiring of specific institutions and delegate responsibilities to relevant team members	6,000	Start and end of project
Steering Committee Meetings to review and assess project progress and performance	Oversight by PM and UNIDO Field Office in Tunisia Project Steering Committee to review the project performance and make corrective decision	6,000	Annually prior to APR/PIR and to the definition of annual work plans
Annual Progress Reports (APRs) and Project Implementation Reviews (PIRs)	PM UNIDO Field Office in Tunisia	0	Annually
Quarterly progress reports	PM	0	Every three months
Final Project Evaluation	Terms of Reference developed by PM under guidance from UNIDO Evaluation Group Final Evaluation carried out by national independent evaluators	10,000 (independent evaluators only)	Evaluation at least one month before the end of the project; report within 90 days of project end
Lessons learned	PM	0	By the end of project implementation; annual as part of PIR
Visits to field sites *(UNIDO staff travel costs to be charged to agency fees not to project)*	MEE	5,000	Every six months
	PM and UNIDO Field Office in Tunisia	0	Annually
	Representatives from the Steering Committee		
TOTAL indicative cost* ** Excludes project team staff time and UNIDO staff and travel expenses*		30,000	