GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

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

For more information about GEF, visit TheGEF.org

PART I: PROJECT INFORMATION

Project Title: Reducing UPOPs and Mercury releases from healthcare waste management, e-waste treatment, scrap processing and biomass burning.			
Country(ies):	Colombia	GEF Project ID:[1]	6928
GEF Agency(ies):	UNDP (select) (select)	GEF Agency Project ID:	5481
Other Executing Partner(s):	Ministry of Environment and and Sustainable Development (MADS)	Submission Date:	2016-03-03
GEF Focal Area (s):	Chemicals and Wastes	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of Parent Program	[if applicable]	Agency Fee ($)	551,000

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in $) GEF Project Financing	(in $) Co-financing
(select) CW-2 Program 3 (select)	Reduction and elimination of POPs	GEFTF	5,114,000	25,523,491
(select) CW-2 Program 4 (select)	Reduction or elimination of anthropogenic emissions and releases of mercury to the environment	GEFTF	686,000	7,391,527
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
	Total project costs		5,800,000	32,915,018

B. PROJECT DESCRIPTION SUMMARY

Project Objective: Introduce Best Environmental Practices (BEP) and Best Available Technologies (BAT) to reduce the release of unintentionally generated Persistent Organic Pollutants (UPOPs) and mercury from the treatment of healthcare waste (HCW), the processing of Waste Electrical and Electronic Equipment (WEEE), processing of iron and steel, and biomass burning in the sugarcane sector.

Project Components/ Programs	Financing Type[3]	Project Outcomes	Project Outputs	Trust Fund	(in $) GEF Project Financing	(in $) Confirmed Co-financing
Component 1. Prevent and minimize the generation of UPOPs and update their inventory	Inv	UPOPs inventories updated Generation of UPOPs emissions minimized	1.1 One (1) UPOPs inventory developed. 1.2 Four (4) national assessments completed,	GEFTF	3,861,000	20,273,491

[1] Project ID number remains the same as the assigned PIF number.
[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.

		and prevented.	and assessment reports finalized. 1.3 Ten (10) demonstration projects implemented leading to a UPOPs release reduction of 100 g-TEQ.			
Component 2. Prevent and reduce mercury releases	Inv	Mercury releases prevented and reduced.	2.1 One (1) assessment on the use of mercury-containing devices in the HC sector completed and one (1) guideline on the replacement of mercury-containing equipment in the HC sector drafted/ developed. 2.2 Two (2) demonstration projects in the HC and WEEE sectors implemented, resulting in the improved management/phase-out of 300 kg of mercury through BAT/BEP introduction.	GEFTF	686,000	7,191,527
Component 3. Strengthening the institutional, administrative, legal, technical and regulatory framework for reducing UPOPs and mercury.	TA	Institutional, Administrative, legal, technical and regulatory framework for reducing UPOPs and Mercury strenghtened.	3.1 Four (4) national guidelines based on BAT/BEP published. 3.2 Two (2) technical regulations, one on the management of HCW and one on the management of WEEE, drafted. 3.3 One (1) WEEE generation and management registration system established. 3.4 Four (4) training programmes for authorities developed and 64 national authority staff trained. 3.5 Two (2) training programmes for laboratories developed and 40 labroatory staff trained.	GEFTF	770,000	3,750,000

Component 4. Dissemination of Lessons-learned, monitoring & evaluation	TA	Results from Lessons learned, monitoring and evaluation disseminated.	4.1 Two (2) publications with lessons learned from the UPOPs and mercury demonstration projects published. 4.2 One (1) Project Inception Workshop and five (5) annual workshops organized. 4.3 One (1) Mid-term report and one (1) final evaluation report prepared.	GEFTF	203,000	900,000
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
			Subtotal		5,520,000	32,115,018
			Project Management Cost (PMC)[4]	(select)	280,000	800,000
			Total project costs		5,800,000	32,915,018

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

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

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount ($)
Recipient Government	Ministry of Environment and Sustainable Development	In-kind	800,000
Private Sector	Eight (8) Healthcare waste management facilities (La Chorrera HC center – San Rafael; Tecniamsa; Ecofuego; Preservec; Asei; Coambiental; Vertisa; Futuraseo)	Grants	5,057,354
Private Sector	Five (5) Iron and steel industries (Sidenal; Gerdau Diaco; Paz del Rio; CI Metales la Unión; Siderúrgica de Caldas Ternium)	Grants	6,266,169
Private Sector	ASOCAÑA (Association of sugarcane growing companies)	Grants	4,500,000
Private Sector	Facilities for the collection and management of WEEE (Ecocomputo; Red Verde Programme; Cenare; Sidenal; Ocade; Holcim; Argos)	Grants	8,499,968
Beneficiaries	Healthcare institutions (Medellin public hospitals network; Meredi Hospital)	Grants	100,000
Private Sector	Mercury waste facility (New Stetic)	Grants	968,387

[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.

Private Sector	Mercury-containing energy efficient lights and primary batteries collection programmes (Lúmina Programme; TRONEX Recopila Program; Pilas con el Ambiente Program)	Grants	5,318,451
Private Sector	Mercury-containing energy efficient lights and primary batteries facilities (Innova, Ecoindustria, Lito SAS)	Grants	1,404,689
Total Co-financing			32,915,018

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee[a)] (b)[2]	Total (c)=a+b
UNDP	GEF TF	Colombia	Chemicals and Wastes	POPS	5,114,000	485,830	5,599,830
UNDP	GEF TF	Colombia	Chemicals and Wastes	Mercury	686,000	65,170	751,170
(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					5,800,000	551,000	6,351,000

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	*hectares*
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	*hectares*
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	*0,3 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:*

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 D.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF[6]

[5] Update the applicable indicators provided at PIF stage. 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.

[6] For questions A.1 –A.7 in Part II, if there are no changes since PIF , no need to respond, please enter "NA" after the respective question.

A.1. *Project Description*. Elaborate on: 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, GEF focal area[7] strategies, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

No changes to the project´s objectives, intentions, scope or end targets were made since the PIF stage. However, the number of components was reduced to 4 to streamline the logical flow and projects outputs were re-aligned according to these components. Also the number of indicators was reduced to in order to keep the M&E burden manageable as these indicators are to be monitored annually and will be reported to the GEF and others. It was done to enhance the effectiveness of the M&E framework.

During the preparation of the project (PPG Phase) it was determined that the work associated with Mercury was underestimated when the PIF was originally presented to the GEF Sec. More activities have been included than what was originally anticipated. Therefore, an additional 200,000 US$ have been requestetd (3.6 % of orignally requested project grant). On top of that, a small amount of funds have been reallocated from CW-2 Program 3 to CW-2 Programme 4. In total, 5,114,000 US$ have been requested for CW-2 Programme 4 and 686,000 US$ have been requested for CW-2 Programme 4.

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

Colombia ratified the Stockholm Convention in 2008 and signed the Minamata Convention in 2013. Even so, Colombia continues to face many challenges pertaining to the management and control of hazardous and toxic substances, including the release of UPOPs and mercury. Colombia undertook its NIP in 2010 with the support of World Bank and UNDP1. The University of Antioquia realized a national mercury inventory in 2009 with the support of the Ministry of Environment and Sustainable Development (MADS).

Inventory releases for dioxins and furans (from here on referred to as “UPOPs) undertaken as part of the preparation of Colombia’s National Implementation Plan (August 2010) , indicated dioxin and furan releases of 790.17 g-TEQ/year (base year 2002) . Of these releases, 22% (177.44 g-TEQ/year) were released from the healthcare (HC) sector, the iron and steel industry and the sugarcane sector combined. However it should be noted that besides dioxins and furans there are other UPOPs which are covered under the Stockholm Convention’s Annex C, however, for those UPOPs no release information is available or was taken up in the 2010 NIP. The 2010 NIP UPOPs inventory also did not take into consideration releases from Waste Electrical and Electronic Equipment (WEEE) processing, which at the time was not a very large waste stream.

With respect to mercury releases, the 2009 Mercury Inventory report indicated that mercury releases amounted to 345,570 kg Hg/yr (base year 2009), of which the HC and WEEE sectors were responsible for 9,735 kg Hg/yr, corresponding to approximately 3% of total releases per year. The other main sectors responsible for mercury releases are ASGM (56%) and production of chemicals (28%).

In terms of human health impact, dioxins can cause chloracne, non-Hodgkin’s lymphoma, soft-tissue sarcoma, and immunosupression; furans, can cause sperm abnormalities and hepatocellular cancer ; while mercury, (which can exist in various forms, all have different toxic effects) can have serious impacts on the nervous, digestive and immune systems, and on lungs, kidneys, skin and eyes .

The National Health Institute in Colombia undertook a study in 2014 which monitored 204 housekeepers in Bogota city (an industrial and services mega city, located far from mining sites). The prevalence of mercury in some of the biomarkers was 99,2% (n=398), with the mercury concentration being higher in individuals who consumed higher

[7] For biodiversity projects, in addition to explaining the project’s consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving..

amounts of fish. Clinical studies indicated that health consequences included: lost memory 79,6% (n=43), trembling 46.3% (n=25), and attention deficit 25.9% (n=14). This study showed the magnitude of the mercury problem in Colombia and the impact of exposure .

In the country, there are two main barriers that need to be overcome to reduce the releases of UPOPs and mercury (see also Figure 1: Theory of Change on page 12 of the UNDP-GEF Project Document).

Firstly, the country lacks the required knowledge, awareness and technical know-how on how to improve the management of UPOPs and mercury and the type of BEP and BAT that could be applied in priority sectors to reduce UPOPs and mercury releases. Without overcoming this barrier, the uncontrolled incineration and open burning of Healthcare Waste (HCW) and biomass; the use of contaminated ("uncleaned) scrap metal as raw material in the Iron and Steel Industry and inadequate recycling and processing of WEEE will continue to lead to the generation of UPOPs and other contaminants of global concern (e.g. PBDEs). Similarly, without overcoming this barriers, releases of mercury will continue to originate from the healthcare sector and the management of lighting products and batteries.

Secondly, the country lacks a clear policy and institutional framework for the management of UPOPs and mercury. This second barrier is apparent through the following immediate causes, which pose challenges in reducing releases of POPs and mercury:

- Lack of institutional capacity (environment, health and commerce authorities) to conduct inspections, ensure continuous monitoring and coaching, and thus, control UPOPs and mercury releases.
- Lack of knowledge about laboratory techniques to analyze ad monitor UPOPs and mercury.
- Lack of awareness on POPs and mercury among priority sectors and communities.
- Lack of updated information on (U)POPs, mercury and PBDEs.

2) The baseline scenario or any associated baseline projects

Healthcare Sector
Infectious healthcare waste (HCW) generated by healthcare facilities is a hazardous waste stream that poses particular challenges in Colombia. Currently, the treatment of HCW is mainly through incineration. However, many incineration facilities use obsolete technologies with deficient emission controls, which is especially the case in poor areas located far away from urban centers. The 2002 UPOPs inventory concluded that the incineration of HCW resulted in UPOPs releases amounting to 89 g-TEQ/year.

In addition, it is common for hospitals and other healthcare facilities (HCFs) to make use of mercury containing medical devices and products, such as thermometers, blood pressure meters and dental amalgam. When broken these products are most often not kept separate from other waste streams and end up being incinerated or disposed of along with regular household waste.

The 2009 mercury inventory concluded that HCW incineration was responsible for mercury releases of approximately 176 kg-Hg/year, the breakage of medical thermometers for 1,921 kg-Hg/year, the use and disposal of dental amalgam (including the weight of the metal) 5,208 kg-Hg/year, and the use of mercury manometers (including industrial uses) 225 kg-Hg/year (release rates are based on imported and sold quantities).

WEEE Sector
The Waste Electrical and Electronic Equipment (WEEE) stream is rapidly growing in Colombia. Between 2012 and 2015 this stream has grown by 19.17% . One of the Government's primary concerns with respect to the growth of this waste stream is that there is almost no in-country capacity to manage/treat and dispose of this waste stream properly. Of particular concern are the current practices that are being used to extract precious and strategic metals, resulting in the release of Unintentional Persistent Organic Pollutants (UPOPs), such as Polychlorinated dibenzo-p-dioxins (PCDD) and dibenzofurans (PCDF); Polybrominated diphenyl ethers (PBDEs) contained as flame retardants in plastics of TV and computer casings; and, PCBs. As electronic goods also contain a wide variety of other hazardous substances (arsenic,

cadmium, mercury, bromides, lead, phosphorus pentachloride; mercury) these are also often released during unsafe dismantling, recovery and recycling practices.

It is estimated that brominated flame retardant-containing plastics make up approximately 20% of the total plastics contained in the WEEE stream, however currently there is not a precise quantification of the release of UPOPs as a result of WEEE recycling/recovery practices. It is estimated that between 2016 and 2020, approximately 3,148 tons of plastics from computers, computer peripherals, refrigerators and disintegrated vehicles will be collected.

In addition, the WEEE stream also includes mercury-containing wastes, such as mercury-containing energy efficient lights and primary batteries. Unfortunately, capacity for the treatment and disposal of mercury-containing products is very limited in Colombia. The 2009 inventory estimated that mercury-emissions from energy efficient light bulbs amounted to 2,194 kg Hg/year; and from primary batteries, 11 kg Hg/year8.

Iron and Steel Industry
Colombia's iron and steel industry consists of five big companies, one for primary production and four for secondary production. Because of the presence of chlorine components in metal junk, the secondary processing of such metals results in the release of dioxins and furans. According to the 2002 national UPOPs inventory, the nonferrous and ferrous industry produced 47.3 g-TEQ/year of dioxin and furan emissions, of which the iron and steel industry emitted 40% (18.92 g-TEQ/year)7. At the same time, this sector also emits mercury releases. The 2009 Mercury Inventory indicated that primary ferrous metal production releases 14 kg-Hg/year and secondary ferrous metal production 0,3 kg-Hg/year8.

Sugarcane Industry
In Colombia, sugarcane plantations and mills are an important contributor to the GDP (1%). In the Cauca river valley region alone, more than 200,000 hectares are dedicated to sugarcane plantations, which produce on average 20 million tons of cane per year. To facilitate the sugarcane harvesting process, biomass burning is being practiced, which results in the release of approximately 69.5 g-TEQ/year7. Although mechanical pre-harvesting is being practiced in certain areas, replication of this practice cannot be introduced fully unless alternative livelihoods for the families involved in biomass burning have been created (it is estimated that approximately 12,000 families currently depend on income from this activity).

Associated Baseline Projects
The Government of Colombia, private sector entities, civil society organizations and public institutions have made and will continue to make significant contributions that constitute/make-up associated baseline projects in the four sectors described above. These associated baseline projects include past, on-going and planned baseline projects as well as other contributions to the project's baseline and co-financing provided by the project's stakeholders and beneficiaries (including financing/investments provided to baseline projects) which have been presented in detail in the Project Document in Section III "Results and Partnerships/Partnerships, Table 1, 2, 3 and 4 (pages 19 - 24) and Section VIII "Financial Planning and Management" Table 7 "Parallel co-financing" (pages 49 - 51).

3) The proposed alternative scenario, GEF focal area strategies, with a brief description of expected outcomes and components of the project.

To be copied from ProDoc
GEF Focal area strategies is to be developed

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

The Government of Colombia, private sector entities, civil society organizations and public institutions have made and will continue to make significant contributions to the project's baseline (past, on-going and planned baseline projects as well as other contributions to the project's baseline and provided co-financing, have been presented in detail in the

Project Document in Section III "Results and Partnerships/Partnerships, Table 1, 2, 3 and 4 (pages 19 - 24) and Section VIII "Financial Planning and Management" Table 7 "Parallel co-financing" (pages 49 - 51).

The scope and impact of the proposed project that will address 3 of the 8 national priority actions taken up in the 2010 NIP with a focus on four (4) priority sectors (Healthcare, Iron and Steel Industry, Sugarcane Production and WEEE recycling) while providing complementary support to these sectors in establishing capacity for the phase-out and management of products containing mercury (primary batteries, mercury containing lamps and medical devices), will allow the country to make significant strides towards meetings its future obligations under the Minamata Convention and its current obligations under the Stockholm Conventions. As such the project can be considered entirely complementary.

As can be deducted from Section VIII "Financial Planning and Management" Table 7 "Parallel co-financing" (pages 49 - 51), significant investments will be made by entities operating in the four sectors supported by the project, including sugarcane producers, waste treatment facilities, iron and steel producers and other beneficiariers, such as healthcare facilities. These investments (see column "planned activities/outcomes" of Table 7) will predominantly be allocated towards the purchase and installation of BAT conform technologies (mechanical harvesting, treatment of mercury containing wastes, etc.); upgrading of facilities and infrastructure; monitoring of UPOPs releases; and the collection, management and segregation of waste streams.

Considering significant cash/grant co-financing is being provided by the project's partners, the project will be able to use GEF resources solely to address UPOPs and mercury reduction efforts through the provision of incremental funding, to add on to investments already being made by project partners. As such the proposed project can be deemed as entirely incremental.

In addition, GEF TF contributions will allow for the consolidation of the enabling environment necessary for the sustained application of these principles in the long term, building upon baseline activities already put in place by the national government, including conducting inventories and sector assessments, as well as further strengthening the institutional, administrative, legal, technical and regulatory framework for reducing UPOPs and mercury releases.

5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF).

The project's Global Environmental Benefits (GEBs) over its duration will be:
- A reduction in UPOPs releases of 100 g-TEQ.
- A reduction in mercury releases of 300 kg.

These reductions are made up as follows:

UPOPs (100 g-TEQ):
- Four (4) healthcare sector demonstration projects are expected to result in a total UPOPs release reduction of 70 g-TEQ over the project’s duration.
- Four (4) iron and steel sector demonstration projects are expected to result in a total UPOPs release reduction of 10 g-TEQ over the project’s duration.
- One (1) sugarcane demonstration project is expected to reduce 20 g-TEQ of UPOPs releases over the project’s duration.
- One (1) WEEE demonstration project is expected to reduce xx g-TEQ of UPOPs releases.

Mercury (300 kg):
- One (1) healthcare demonstration project aims to reduce the release of 14 Kg of mercury through the substitution of mercury containing thermometers and sphygmomanometers with mercury-free alternatives from four (4) selected HCFs, and additionally treat 87 Kg of mercury to be collected from HCFs located in the four districts where the healthcare demonstration projects will be implemented.

- One (1) WEEE demonstration project will introduce BAT and BEP for the treatment of mercury-containing energy efficient lights and mercury containing primary batteries, and is expected to result in the treatment of 199 Kg of mercury.

Additionally, the WEEE demonstration project will reduce releases of Polybrominated diphenyl ethers (PBDEs) contained as flame retardants in plastics of TV and computer casings, and PCBs. Furthermore, the WEEE demonstration project will also reduce releases of other hazardous substances (arsenic, cadmium, mercury, bromides, lead, phosphorus pentachloride; mercury).

6) Innovation, sustainability and potential for scaling up.
Kindly also refer to the Project Document - Section XI "Sustainability of Results" sub-sections "Sustaining" and "Scale-up and Replication".

Innovation and potential for scaling up
On the one hand the project will introduce technologies and approaches that have been tested elsewhere (often abroad), which have proven successful and which are thought to be fitting for local and national circumstances in Colombia, on the other, the project will introduce practices that have not yet been tested elsewhere, but which are thought to be technically and financially feasible and sustainable for Colombia (For a summary of the practices and technologies that will be introduced through the project's demonstration projects and their innovative nature kindly refer to the sector specific sections below). The fact that a variety of interventions is being tested and applied will make scale-up and replication easier. The project will document the interventions applied by the demonstration projects, which will allow other stakeholders to replicate such practices and select the practices and technologies most fitting to their needs and circumstances.

Further replication will be achieved through the development (and subsequent adoption) of 2 technical regulations and 4 technical guidelines. The technical regulations and guidelines, which will be developed based upon the experiences, results, challenges and lessons-learned from the project’s assessments and demonstration projects, will support the scale-up/replication of project interventions among entities/partners which did not participate in the project, through enactment and monitoring of these regulations/technical guidelines by MADS and other public entities.

Healthcare
The project will introduce various approaches to improve the management of healthcare waste, meaning different for each selected HCF, healthcluster and/or district. For example, the project will support the implementation of a HCW traceability system (Itagui municipality); introduce physico-chemical HCW treatment; introduce a mobile/transportable unit (containing an autoclave and necessary equipment for sterilization and shredding of biomedical waste and sharps) for a cluster of hospitals; introduce HCW treatment by autoclaves and microwaves; improve the operation of a HCW incinerator (redesign and substitute the post-combustion chamber and closed circuit cooling tower; improve neutralization and adsorption of gasses from incineration by the installation of a dry scrubbing system, and set up a ceramic baghouse system); and finally introduce secured landfills/landfill cells for HCW. These interventions are all tailored to local circumstances and needs identified by HCFs and HCW treatment facilities. Most of these interventions are innovative in the context of Colombia and have not yet previously been applied/tested in the country.

Iron and Steel Industry
The project’s BAT and BEP demonstration projects in this sector will cover 80% of the entire steel industry in Colombia. However, results from the demonstration project could also be replicated in other metal industries, such as lead or aluminum production, which are considered smaller size producers. To ensure replication of project successes, these type of industries will be involved in the training and workshops that will be organized during the project’s implementation.

In terms of practices and technologies, there are several innovative interventions being implemented through 4 demonstration projects. The first 2 demonstration project will focus on improving the process for the collection of metal scrap, involving waste pickers and recyclers from two large cities in Colombia. Although the project developers are

unaware of similar initiatives undertaken elsewhere, it is believed that the process will be effective because of the direct involvement of the Association of Recyclers and Waste Pickers, which is also expected to make this project approach cost effective. The third demonstration project aims to optimize the fragmentation process of scrap metal as well as modify the feedstock of the electric furnace. The fourth demonstration project anticipates using scrap metal from different sources including vehicle dismantling, the latter will also receive project support and will only be the 2nd of its kind in Colombia. The 3rd and 4th demonstration projects aim to improve the quality of scrap metal, as well as its storage and conditioning practices. Both approaches are expected to lead to improved combustion performance in furnaces, among else and result in a reduction of UPOPs releases.

Biomass burning
The results from BAT and BEP implementation in the sugarcane sector will be replicated by ASOCAÑA, the association who represents the majority of sugarcane mills in the country, and CENICAÑA, an institute that investigates and disseminates research results related to sugarcane plantation among growers and producers. Additionally, the project's results from the demonstration projects and the guidelines on biomass management during harvesting (which will be developed based on demonstration project experiences), will continue to guide sugarcane companies to develop their activities after the project comes to an end.

Although mechanical pre-harvesting is being practiced in certain areas in the country, replication of this practice cannot be fully introduced/replicated unless alternative livelihoods for the families involved in biomass burning have been created (it is estimated that approximately 12,000 families currently depend on income from biomass burning). Because of these socioeconomic consequences of halting biomass burning, the government of Colombia has not been successful in putting a halt to these practices. The combination of introducing mechanical pre-harvesting while at the same time creating alternative livelihoods, makes this project intervention innovative. If the proposed project approach proves successful, the creation of alternative livelihoods will become a key factor in replicating mechanical pre-harvesting practices across the country and halting sugarcane burning.

WEEE
The project will support 2 demonstration projects in the WEEE sector. One (1) demonstration project will built very much needed capacity for the treatment and disposal of mercury-containing products: Energy efficient lights and Primary batteries. In the case of the treatment of spent lights, the country's capacity for their treatment will be doubled by the project through the establishment of an additional treatment facility in the country. In the case of primary batteries, no treatment capacity is currently in place and the project aims to support the introduction of hydrometallurgy technology for their treatment, as such this intervention is considered innovative.

The second demonstration project will focus on the separation of brominated plastics and polyurethane foams contained in wastes of computers and peripherals, refrigerators, and vehicles. Currently, waste generators and waste managers do not identify and segregate plastics containing brominated flame retardants, and have not implemented appropriate measures to deal with these types of plastics, since they have no knowledge about associated risks, how to identify such plastics, or why it is important to separate them. This demonstration project aims to improve the collection of such plastics, implement identification methods for plastics containing brominated flame-retardants, segregate PBDE containing plastics from other plastics, and ultimately treat such plastics by co-procesing in cement kilns. This approach has been applied in other countries, but is entirely innovative in Colombia.

In term of potential for replication, demonstrated WEEE practices can be easily replicated or expanded to also cover other parts of the country.

Sustainability (kindly also refer to the Project Document's Section IX. "Sustainability of Results"):

The financial sustainability necessary for continuation of activities launched as part of the project will be put in place and ensured by the project and its demonstration projects. Waste Management Facilities will make the necessary investments in infrastructure and BAT/BEP equipment. After the project comes to an end, those facilities will continue to operate in line with the conditions established by the project. Waste generators will continue to be responsible to

carry the costs for waste management and treatment, as established by Law 1252 (2008), and as such avoid reliance on national budget or project budget allocations. Finally, because BEP and BAT have been introduced through the demonstration projects, the decrease in UPOPs releases will be sustained beyond the project's duration.

Healthcare facilities participating in the mercury substitution programme will maintain the substitution beyond the project's duration, since such requirements are established by Law 1658, 2013 (by 2020, it will be mandatory for all HCFs to use mercury-free equipment). As such reductions in mercury releases from the project's demonstration activities will be sustained.

The demonstration project related to the brominated flame-retardants containing plastics originating from WEEE and vehicle disassembling will determine the type of management/treatment that these plastics should receive in the future. Based on the project's results, MADS will draft a guideline for the management and treatment of these types of plastics, which after its adoption/approval should be adhered to by waste generators and waste management facilities.

Finally, installed infrastructure/technologies for mercury waste treatment and management will continue to be used while service costs for mercury treatment will be covered by mercury-waste generators. When mercury-containing medical devices and other products will have been phased-out by 2020, installed BAT capacity for the treatment of mercury containing wastes will continue to be applied/used for other mercury containing products and wastes, such as mercury containing lights (in accordance with Resolution 1511 (2010)), and primary batteries (in accordance with Resolution 1297 (2013)). Currently these types of wastes are allowed to be disposed of in a security cell, but starting 2017 these types of wastes will need to be treated and recycled (glass and metals in the case of spent lamps, and recovery of mercury, manganese and zinc in the case of primary batteries). Without treatment options being available at national level, such wastes would have to be treated abroad, which would be much more costly.

The measures which will be taken in the iron and steel industry to reduce UPOPs releases, will address a pressing need in this industry, as it needs to collect cleaner scrap and in high enough quantities to avoid the import of (more expensive) raw/recycled materials. Furthermore, through the demonstration projects, the industry will invest in BAT/BEP technologies and process modifications, which will result in UPOPs reductions. Because new practices and technologies will have been introduced by the demonstration projects and result in UPOPs reductions, these will also be sustained in the future.

The introduction of BAT and BEP in the sugarcane sector to reduce burning will be undertaken in close collaboration with ASOCAÑA and CENICAÑA. ASOCAÑA represents approximately 90% of the sugarcane plantation firms while CENICAÑA provides technical directions for improvements in sugar production in the sector. The demonstration projects, in partnership with the plantations, will spur investments in mechanical biomass clearing, which will continue to be used beyond the project's duration (especially in light of the legislation which controls and prohibits biomass burning). The project's initiatives to create alternative livelihoods for those households currently involved in biomass burning, will further decrease biomass burning practices and provide households currently replying on biomass burning for their income, with alternative means of income/livelihoods.

Finally, the legislative framework already in place, which will be further strengthened through the development of guidelines and technical regulations as part of the project, will provide an additional assurance that UPOPs and mercury reductions will be sustained beyond the project's duration.

A.2. Child Project? If this is a child project under a program, describe how the components contribute to the overall program impact.

Not Applicable

A.3. *Stakeholders*. Identify key stakeholders and elaborate on how the key stakeholders engagement is incorporated in the preparation and implementation of the project. Do they include civil society organizations (yes ☒ /no☐)? and indigenous peoples (yes ☒ /no☐)? [8]

The implementation of this project requires the active participation of several partners, government partners as well as civil society and private sector partners. Responsibilities of these partners in the project's implementation as well as initiatives supported by these partners in addressing the project's development challenges, have been summarized in Tables 1, 2 and 3 on page 19, 20, 21, 22, 23 and 24 of the UNDP-GEF Project Document.

The project will involve communities from indigenous and afro-american regions, local communities and waste pickers, as summarized in Table 4 on page 24 of the UNDP-GEF Project Document.

A.4. *Gender Equality and Women's Empowerment.* Elaborate on how gender equality and women's empowerment issues are mainstreamed into the project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men. In addition, 1) did the project conduct a gender analysis during project preparation (yes ☒ /no☐)?; 2) did the project incorporate a gender responsive project results framework, including sex-disaggregated indicators (yes ☒ /no☒)?; and 3) what is the share of women and men direct beneficiaries (women %, men %)? [9]

Following a preliminary gender analysis conducted during the project's formulation, gender aspects related to the project's activities have been summarized below. It should be noted however, that the project supports four (4) different sectors (Healthcare; WEEE management; Iron and Steel Industry; and the Sugarcane Industry). In each of these sectors, the % of women and men beneficiaries (direct and in-direct) varies.

As can be seen in Section V. PROJECT RESULTS FRAMEWORK in the GEF-UNDP project document on pages 35 t/m 42, the PRF is gender responsive and contains sex-disaggregated indicators.

Healthcare Sector:
Within healthcare facilities, the management of HCW and mercury-containing equipment and wastes is mostly assumed by women (90%), which make up the majority of healthcare facility staff (e.g. nurses and cleaning staff). Once healthcare waste is passed on to waste treatment facilities, they are in the majority of cases handled by men (99%). Therefore, it can be concluded that healthcare waste impacts both genders. This analysis also reiterated the importance to involve the Ministry of Labour in the project's implementation as among its responsibilities is the safeguarding of occupational health.

WEEE:
The management of WEEE is predominantly undertaken by the male population, not only at the side of waste generators, but also on the side of waste treatment facilities. For the purposes of tailoring project activities to project beneficiaries, WEEE management is therefore considered as a male dominated activity, and measures need to be implemented to mitigate exposure risks to workers in this area. However, it should be noted that the inadequate disposal of these wastes could generate exposure risks to both genders, as well as children.

Iron and Steel Industry:
The demonstration projects that will be carried out in the iron and steel sector will involve waste pickers, of which 52% are women and 48% are men. Their activity is considered informal, but upon which many families depend. In Bogota city alone, there are 2,000 families involved in waste picking. The demonstration projects will involve the waste pickers and recyclers associations located in Medellin and Cali City, and aim to improve the labor aspects and income of waste pickers participating in these demonstration projects.

[8] *As per the GEF-6 Corporate Results Framework in the GEF Programming Directions and GEF-6 Gender Core Indicators in the Gender Equality Action Plan, provide information on these specific indicators on stakeholders (including civil society organization and indigenous peoples) and gender.*
[9] Same as footnote 8 above.

Within the iron and steel industry, day-to-day physically demanding activities are mostly undertaken by men, while administrative activities are supported by both men and women (50 – 50). In terms of environmental management, it is mostly women who are involved in decision making related to environmental aspects in this industry.

Sugarcane Industry:
In the sugarcane plantations, field activities are supported by men, however (according to ASOCAÑA) female participation has been increasing recently. Informal sugarcane harvesting is mostly undertaken by surrounding communities, mostly by poor female-headed households.

During the project's preparation it was estimated that there are approximately 5,000 people involved in this illegal activity, women making up the majority. The project therefore aims to create alternative livelihoods for these communities with a focus on poor female-headed households.

In summary, project activities will be implemented with a gender perspective in a manner that they will prevent, mitigate and correct the conditions where women and men (and sometimes children) are exposed to UPOPs, brominated flame retardants and mercury.

A.5 Risk. Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Kindly refer to Table 5 Project Risks on page 29, 30, 31, 32 and 33 of the GEF-UNDP Project Document.

As per standard UNDP requirements, these risks will be monitored quarterly by the Project Manager. The Project Manager will report on the status of the risks to the UNDP Country Office who will record progress in the UNDP ATLAS risk log. Risks will be reported as critical when the impact and probability are high (i.e. 5). Management responses to critical risks will also be reported to the GEF in the annual PIR.

A.6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

For the institutional arrangements for project implementation, kindly refer to Section VII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS of the GEF-UNDP Project Document on page 46 t/m 48.

Planned coordination with other relevant GEF-financed projects:

- GEF/UNDP "Development of National Capacity for the Environmentally Sound Management and Disposal of PCBs".
- GEF/UNEP "Continuing Regional Support for the POPs Global Monitoring Plan under the Stockholm Convention in the Latin American and Caribbean Region".
- GEF/UNDP "Review and Update of the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)"
- GEF/UNIDO "Minamata Convention Initial Assessment (MIA) in the Republic of Colombia"

For an overview of the planned coordination with other initiatives being undertaken at national level, kindly refer to Tables 1, 2 and 3 on page 19 t/m 24 of the UNDP-GEF Project Document, under the heading "Other on-going initiatives/baseline projects, which contribute towards the project's results".

Additional Information not well elaborated at PIF Stage:

A.7 *Benefits.* Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

There are various socio-economic benefits which will be delivered by the project at national and local levels.

In total the project will support the implementation of twelve (12) demonstration projects, which will result in a reduction of UPOPs and mercury releases currently impacting human and environmental health. A reduction in UPOPs and mercury releases will ultimately reduce future health care costs, human suffering and costs for environmental remediation as a result of pollution caused by dioxins/furans and mercury.

Each of these demonstration projects will benefit from significant investments (counted as project co-financing) from sugarcane producers, the iron and steel industry, waste treatment facilities (WEEE, HCW, vehicle recycling, etc.) as well as other project recipients (healthcare facilities). Such investments will be used to put in place Best Available Technologies (BAT) and introduce Best Environmental Practices (BEP), which will allow such entities to comply with new legislation/standards that are becoming more stringest over time. As these entities are putting in place financially sustainable and viable treatment solutions at national level, it avoids having to treat wastes abroad (which is more costly and less sustainable), creates sufficient local and national capacity for the treatment of various types of wastes, while reducing UPOPs and mercury releases (hence achieve Global Environmental Benefits).

Iron and Steel Industry:
The project will support the implementation of four (4) demonstration projects in the iron and steel industry. Two (2) of the demonstration projects will focus on strengthening the collection, segregation and conditioning of scrap metal in two big cities, Cali and Medellin. These projects will optimize scrap metal quality, by improving the flow of raw material and ensuring that it is clean and free of pollutants when it ultimately get processed. These measures will address a pressing need in this industry, as the industry needs to collect cleaner scrap and in high enough quantities to avoid the import of (more expensive) raw/recycled materials. These demonstration projects will involve recycling associations to ensure that the work is socially inclusive, by engaging around 1,500 scrap collectors. The demonstration project will also build the capacity of scrap collectors for improved collection and pre-conditionning of scrap metal and help improve their working conditions, resulting in better social and eonomic conditions.

Biomass burning:
The project aims to implement one demonstration project to reduce UPOPs releases from the intentional burning of sugarcane prior to the harvesting process. This biomass demonstration project will introduce BAT and BEP for pre-harvest biomass clearing, through the establishment of a mechanical pre-harvesting programme. The demonstration project, in partnership with the plantations, will spur investments in mechanical biomass clearing, which will continue to be used beyond the project's duration (especially in light of the legislation which controls and prohibits biomass burning). The demonstration project will also work with local communities, in particular female-headed households who are currently involved in (illegal) biomass burning and sugarcane harvesting, to identify two (2) alternative livelihood options to decrease their reliance on intentional pre-harvest sugarcane burning. Such initiatives will further decrease biomass burning practices and provide such households with other means of income.

Healthcare:
The project aims to implement four (4) demonstration projects in the healthcare sector with the aim to avoid UPOPs releases, as well as one (1) demonstration project that will support the phase-out of mercury-containing devices and equipment from the healthcare sector in a number of Health Care Facilities (HCFs). In addition to reducing releases of UPOPs and mercury (GEBs) from the healthcare sector, these demonstrations projects - by improving Health Care Waste Management Practices - will also protect healthcare staff, waste handlers, waste pickers and surrounding communities from exposure to infectious wastes. Improved HCWM practices will lead to fewer incidences of Hospital

Acquired Infections (HAI) (“nosocomial infections” - an infection that is contracted from the environment or staff of a healthcare facility), and ultimately result in healthier patients and staff, and often surrounding communities. Finally, these demonstration projects also help keep clean(er) protected areas, such as the amazon, which are currently impacted by indiscriminate dumping of HCW.

WEEE: The WEEE demonstration project will reduce releases of UPOPs and mercury (GEBs) from inadequate processing and recycling of e-waste (e.g. Polychlorinated dibenzo-p-dioxins (PCDD), dibenzofurans (PCDF), Polybrominated diphenyl ethers (PBDEs) contained as flame retardants in plastics of TV and computer casings; and, PCBs). Electronic goods also contain a wide variety of other hazardous substances (arsenic, cadmium, mercury, bromides, lead, phosphorus pentachloride; mercury) which are also often released during unsafe dismantling, recovery and recycling practices, all with their own health consequences. By improving WEEE management practices, the project does not only protect human and environmental health from POPs and mercury, but from a wide range of other hazardous and toxic chemicals.

A.8 *Knowledge Management.* Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

Project Component 4 "Dissemination of Lessons-learned, Monitoring & Evaluation", includes various outputs and activities that aim to assess and document in a user friendly manner lessons-learned, experiences and expertise resulting from the project.

First and foremost, as part of project component 1, the project will publish and widely disseminate assessment reports resulting from the four (4) national sector assessments (Healthcare, Iron and Steel Industry; Sugarcane Industry; and WEEE) as well as the national UPOPs inventory.

Lessons-learned from the 12 demonstration projects will be extracted/captured on a yearly basis. Based on lessons-learned and experiences from the demonstrations projects, the project will draft, publish and disseminate two (2) lessons-learned publications (one on UPOPs and one on mercury). These publications will subsequently be disseminated at national, regional and global level.

To share the project's experiences and expertise, the project will also organize, on a yearly basis, a workshop to communicate to the project's partners and other interested partners the project’s progress and results. In total the project will organize five (5) of such workshops over the duration of the project, which would support the replication of project experiences beyond direct project beneficiaries.

Project results are also expected to be disseminated by MADS on a continuous basis at the occasion of various environmental events and exhibitions. Finally, project activities and results will be posted on the MADS website (chemicals and waste section).

The project will also support the establishment of five (5) training programmes. Two (2) training programmes on measures, approaches, and technologies to reduce UPOPs/Hg releases from the HC and WEEE sectors; Two (2) training programmes on measures, approaches, and technologies to reduce UPOPs/Hg releases from the metallurgy and sugarcane production sectors; and one (1) training programme on the validation of protocols for the measurement of UPOPs, brominated flame retardants and mercury. After these trainings have been delivered, training materials will be made available through the MADS’s website and become available as permanent courses/resources. The training programme will also develop a competition among undergraduate students. This competition is about BAT and BEP implementation in the different sectors, in order to help raise awareness and encourage research and studies on the priority areas taken up in this project.

In terms of learning from other relevant projects and initiatives (see also section A.6), the project will closely coordinate with on-going and planned GEF supported POPs, and Chemicals and Waste projects. The project will be implemented in a coordinated manner with two (2) other UNDP Colombia managed GEF financed Chemicals and Waste projects, namely the project "Development of the Capacity for the PCB Environmental Sound Management and Disposal (COL84851-71268)" and the project "Revision and Update of the National Plan for the Implementation of Stockholm Convention on POPs (COL94300/87174)".

For the three (3) UNDP-GEF Chemicals and Waste projects, coordination and administrative issues will be supported by a joint project unit. Each project contributes to the costs of the project unit in accordance with the time and effort that is required for each. The project unit, which will consist of a Project Coordinator, an Administrative Assistant and technical coordinators, will support the implementation of project activities for the three projects. The project unit will be located in an office situated at MADS headquarters.

This joint implementation of three (3) UNDP/GEF Chemicals and Waste projects, will greatly enhance and facilitate information exchange and lessons-learned from each of the 3 projects.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 *Consistency with National Priorities.* Describe the consistency of the project with national strategies and plans or reports and assessements under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:

National Implementation Plan (NIP) for the Stockholm Convention on Persistent Organic Pollutants:

As part of Colombia's NIP preparation (2010), the country agreed on eight (8) national priority actions to meet its obligation under the Stockholm Convention on POPs.

This project directly supports three (3) of those national priorities actions:
i) Develop an action plan for the reduction of dioxin and furan emissions;
ii) Establish an inventory of dioxins and furans; and,
iii) Issue the necessary regulations and laws for dioxins and furans.

The project will focus on four (4) priority sectors: HCW management; WEEE management; Iron and Steel Industry; and, sugarcane production. As such the proposed project is fully in line with the country's NIP and will support the Government of Colombia to meet its obligations under the Stockholm Convention.

Mercury Initial Assessment in support of the Minamata Convention on Mercury

Colombia has not yet undertaken/launched a Minimata Initial Assessment (MIA). However a UNIDO/GEF supported enabling activity entitled "Minamata Convention Initial Assessment (MIA) in the Republic of Colombia" has already been approved by GEF CEO.

However, in 2009 MADS with the Universidad de Antioquia. prepared a Mercury Inventory Report, entitled "Cuantificación de liberaciones antropogénicas de Mercurio en Colombia". With respect to mercury releases, the 2009 Mercury Inventory report indicated that mercury releases amounted to 345,570 kg Hg/yr (base year 2009), of which the HC and WEEE sectors were responsible for 9,735 kg Hg/yr, corresponding to approximately 3% of total releases per year. The other main sectors responsible for mercury releases are ASGM (56%) and production of chemicals (28%).

Although mercury emissions originating from the healthcare sector and the management of spent lighting products and batteries, are not the main release sources of mercury in the country, the phase-out of mercury conaining products from

these sectors as well as the improved management of spent products has been taken up in this project as activities are complementary and very closely related to support the project is going to provide to the four priority UPOPs sectors mentioned earlier.

In supporting the healthcare sector in phasing out mercury containing medical devices and the waste management sector in improving the management and treatment of mercury containing wastes, the proposed project will support the country in meeting its future obligations under the Minamata Convention on Mercury.

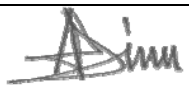
C. DESCRIBE THE BUDGETED M &E PLAN:

Please refer to Table 6 on page 45 & 46 of the GEF UNDP Project Document

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies[10] and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Adriana Dinu, Executive Coordinator, UNDP-Global Environmental Finance		03/03/2016	Jacques Van Engel, Director, UNDP MPU/Chemicals	+212 906 5782	Jacques.van.engel@undp.org

[10] 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).
Kindly refer to Section V. PROJECT RESULTS FRAMEWORK in the GEF-UNDP project document on pages 35 t/m 42.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Please refer to Annex 20 of the UNDP ProDoc

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[11]

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **150,000 USD**			
Project Preparation Activities Implemented	***GEF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent Todate***	***Amount Committed***
Definition of needs and strategies for Institutional Strengthening	8,000	8,000	0
Definition of needs and strategies for improvements to regulatory and policy framework including enforcement in relation to POPs and Mercury	5,000	5,000	0
Preparation of Pilot projects for UPOPs project in Colombia	80,000	40,000	40,000
Development of M&E schemes	10,000	10,000	0
Stakeholder consultations	12,000	12,000	0
Social and Environmental Standards	10,000	10,000	0
Project Scoping and Definition	25,000	25,000	0
Total	150,000	110,000	40,000

[11] If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

ANNEX D: 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