



GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title: National Program for the environmental Sound Management and Live Cycle Management of Chemical Substances.			
Country(ies):	Ecuador	GEF Project ID: ¹	9203
GEF Agency(ies):	UNDP (select) (select)	GEF Agency Project ID:	5706
Other Executing Partner(s):	Ministry of Environment	Submission Date:	2017-06-01
GEF Focal Area (s):	Chemicals and Wastes	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of Parent Program	[if applicable]	Agency Fee (\$)	806,550

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
(select) CW-1 Program 1 (select)	Develop and demonstrate new tools and regulatory along with economic approaches for managing harmful chemicals and waste in a sound manner	GEFTF	350,000	3,106,175
(select) CW-2 Program 3 (select)	Reduction and elimination of POPs	GEFTF	4,345,000	20,405,183
(select) CW-2 Program 4 (select)	Reduction or elimination of anthropogenic emissions and releases of mercury to the environment	GEFTF	3,795,000	17,060,070
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
Total project costs			8,490,000	40,571,428

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To protect human health and the environment by adopting an environmental sound management and live cycle management of chemical substances in Ecuador						
Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
Component 1: Strengthen institutional capacity and the regulatory and policy framework for the Sound Management of Chemicals (SMC)	TA	Outcome 1.1: Four (4) financial and capacity building plans developed and implemented and capacity of 12 private or public entities increased to enable	Output 1.1.1: Development of 2 capacity building plans and 2 financial plans to improve the national reporting on statistics/indicators for POPs, Hg and other	GEFTF	800,000	3,822,984

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](#) and [CBIT programming directions](#).

³ Financing type can be either investment or technical assistance.

			Output 1.2.4: Two (2) Industry incentives developed and proposed for implementation that support conversion to processes which pose less risks and result in less harmful products.			
Component 2: Eliminate POPs stockpiles and reduce the use and release of initial and newly listed POPs (including those contained in products)	TA	Outcome 2.1: 120 tonnes of obsolete POPs and non-POPs pesticides and related waste disposed of. Outcome 2.2: 25 grams TEQ of UPOPs releases reduced.	Output 2.1.1: One (1) In-depth inventory (incl. characteristics of the impacted (work) population and gender dimensions) of “old” and “new” POPs pesticides, non-POPs pesticides, pesticide contaminated sites and storage facilities completed in partnership with AGROCALIDAD/INN OVAGRO and APCSА. Output 2.1.2: At least 30 tonnes of obsolete pesticides repacked, transported and disposed of at a licensed treatment/disposal facility. Output 2.1.3: Clean up or remediation of at least one (1) pesticide contaminated site completed. Output 2.1.4: Empty pesticide container collection, transportation, recycling and disposal increased by 90 tonnes. Output 2.2.1: Assessment of UPOPs generating processes/practices completed at seven (7) facilities (including 5.500 hectares of agricultural lands).	GEFTF	3,468,000	16,725,559

		Outcome 2.3: 30 tonnes of new POPs releases reduced.	<p>Output 2.2.2: Recommendations prepared for BEP/BAT interventions at seven (7) facilities.</p> <p>Output 2.2.3: BEP/BAT introduced to reduce UPOPs releases at two (2) project sites/facilities.</p> <p>Output 2.2.4: Clean up or remediation of at least one (1) UPOPs contaminated site completed.</p> <p>Output 2.3.1: Ten (10) imported products suspected of containing new POPs (PFOs/c-otaBDE) analyzed to verify the existence of new POPs.</p> <p>Output 2.3.2: A Cost-Benefit Analysis and Cost-of-Inaction assessment conducted (incl. identification and quantification of differentiated social benefits and costs between women and men) to inform the selection of alternatives and waste management/treatment options for the top 2 priority POPs containing products.</p> <p>Output 2.3.3: Phase-down (with SENAE) and waste management of top two (2) priority POPs containing products demonstrated in selected sectors/areas.</p>			
Component 3: Implementation of measure for reduction and elimination of Hg from priority sectors	TA	Outcome 3.1: 2 tonnes of mercury use/releases reduced from ASGM at a non-industrial level.	Output 3.1.1: Comprehensive mercury baseline assessment (incl. sex disaggregated and gender specific data) completed for all	GEFTF	3,298,000	15,769,815

			<p>ASGM project sites (Camilo Ponce Enríquez, Portovelo and Chinapintza) at a non-industrial level.</p> <p>Output 3.1.2: Mobile training plant installed at “home base” location and operationalized.</p> <p>Output 3.1.3: 350 ASGM miners and mining communities trained (of which at least 30% are women, and 5% are indigenous).</p> <p>Output 3.1.4: At least 5 processing plants (at least 2 occasionally used by women) supported in improving their ore processing.</p> <p>Output 3.1.5: At least 3 mining groups (of which 1 containing women miners) supported in their formalization processes.</p> <p>Output 3.1.6: Demonstration pilot focusing on gravity recovery of Hg from contaminated tailings implemented.</p> <p>Output 3.2.1: Comprehensive national mercury baseline assessment completed for medical devices and lighting products, and assessment conducted on impact on women/men.</p> <p>Output 3.2.2: List of available alternatives for Hg containing medical devices and Hg containing lighting products identified (incl. assessment of their costs)</p>			
		<p>Outcome 3.2: 35 kg/yr of mercury use/releases avoided from priority sectors (other than ASGM).</p>				

			<p>and benefits).</p> <p>Output 3.2.3: Assessment concluded of existing disposal and treatment options (national/international level) for mercury containing products and their wastes.</p> <p>Output 3.2.4: A Cost-Benefit Analysis and Cost-of-Inaction assessment (incl. identification and quantification of differentiated social benefits and costs between women and men) conducted to inform the selection of mercury-free alternatives and waste management/treatment options.</p> <p>Output 3.2.5: Phase-in of mercury-free alternatives piloted in 1 high profile HCF facility.</p> <p>Output 3.2.6: Electricity sector pilot project implemented to support the phase-out and/or improved management of spent mercury containing lamps.</p> <p>Output 3.2.7: The environmentally sound treatment/disposal of 10 tonnes of mercury containing waste products demonstrated.</p>			
		<p>Outcome 3.3: Access to finance improved for ASGM sector through development/ improvement of 2 financial products.</p>	<p>Output 3.3.1: At least one (1) financial entity has developed/improved a product that serves the ASGM sector.</p> <p>Output 3.3.2: One (1) competitive</p>			

			<p>funds mechanism (CFM) established to finance five (5) environmental and social entrepreneurship and technology innovations within the ASGM.</p> <p>Output 3.3.3: At least 2 plants (1 ASGM processing plants and 1 industry) have made use of existing tax incentives to finance cleaner production systems.</p> <p>Output 3.3.4: Responsibly produced gold (10 % produced by women) by a project beneficiary purchased at a higher price by a public or private legal buyer.</p>			
<p>Component 4: Raise awareness, ensure project monitoring and disseminate project results and experiences.</p>	TA	<p>Outcome 4.1: 11,778 people (3,533 females and 8,245 males) of whom awareness has been raised on the sound management of chemicals.</p> <p>Outcome 4.2: 29 GEF UNDP M&E requirements met and adaptive management applied in response to needs and Mid-term Evaluation (MTE) findings.</p> <p>Outcome 4.3: 28 Case study reports, publications, presentations, (web-based) articles, etc. summarizing lessons-learned, best practices and experiences, disseminated at national, regional and global level.</p>	<p>Output 4.1.1: Awareness raised of 11,778 people (3,533 female and 8,245 male) on the sound management of chemicals.</p> <p>Output 4.2.1: 29 of GEF M&E requirements met and adaptive management applied in response to needs and Mid-term Evaluation (MTE) findings.</p> <p>Output 4.3.1: 28 Case study reports, publications, presentations, (web-based) articles, etc. summarizing lessons-learned, best practices and experiences, disseminated at national, regional and global level.</p>	GEFTF	520,000	2,389,365

	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
				Subtotal	8,086,000	38,707,723
Project Management Cost (PMC) – including up to 332,585 USD in DPC				(select)	404,000	1,863,705
				Total project costs	8,490,000	40,571,428

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 (MAE)	Grants	3,102,082
Recipient Government	Ministry of Mines (MoM)	Grants	3,540,834
Private Sector	APCSA	Grants	439,500
Private Sector	INNOVAGRO	Grants	558,873
Private Sector	SEF Canada Ltd. Clean Gold Community Solutions	Grants	1,500,000
Recipient Government	Ministry of Environment (MAE); Ministry of Mines (MoM); Ministry of Health (MSP); National Water Secretariat (SENAGUA); Ministry of Agriculture (MAGAP - AGROCALIDAD); Ministry of Productivity; Ecuador Normalization Service (INEN); Ministry of Electricity and Renewable; Coordination Ministry for Strategic Sectors (MICSE)	In-kind	29,997,264
Private Sector	APCSA	In-kind	805,978
Private Sector	INNOVAGRO	In-kind	626,897
(select)		(select)	
Total Co-financing			40,571,428

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

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ²	Total (c)=a+b
UNDP	GEF TF	Ecuador	Chemicals and Wastes	POPS	4,345,000	398,050	4,743,050
UNDP	GEF TF	Ecuador	Chemicals and Wastes	Mercury	3,795,000	380,000	4,175,000
UNDP	GEF TF	Ecuador	Chemicals and Wastes	SAICM	350,000	28,500	378,500
(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					8,490,000	806,550	9,296,550

PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁴

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	<i>hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>hectares</i>
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;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
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)	<i>metric tons</i>
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)	<i>150 metric tons</i>
	Reduction of 1000 tons of Mercury	<i>2 metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
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	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

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/CBIT Trust Fund) in Annex D.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF⁵

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

⁴ 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.

⁵ 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.

scenario, GEF focal area⁶ 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, CBIT and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

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

NA. No changes since PIF.

Kindly refer to PART II - Project Justification of the original PIF (See Annex O to the UNDP-GEF Project Document). For additional information kindly refer to the UNDP-GEF Project Document - Chapter I - Development Challenge.

2) The baseline scenario or any associated baseline projects.

NA. No changes since PIF.

Kindly refer to PART II - Project Justification of the original PIF (See Annex O to the UNDP-GEF Project Document). For additional information kindly refer to the UNDP-GEF Project Document - Chapter I - Development Challenge and Annex L to the UNDP-GEF Project Document - Baseline Assessments performed at PPG Phase.

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

Kindly refer to the UNDP-GEF Project Document - Chapter III: Results and Partnerships, Section i) Expected Results.

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

NA. No changes since PIF.

Kindly refer to PART II - Project Justification of the original PIF (See Annex O to the UNDP-GEF Project Document). For additional information on the contributions from co-financing, kindly refer to the UNDP-GEF Project Document, Chapter VIII - Financial Planning and Management, in particular Table 7: "Overview of co-financing" and in specific the column: Planned Activities/Outputs.

5) Global Environmental Benefits (GEFTF)

The Global Environmental Benefits (GEB) of the project will consist of the following:

- Reduction in releases of dioxins and furans (UPOPs) resulting from the introduction of BEP/BAT at two (2) project sites/facilities. It is estimated that a reduction of 25 g-TEQ/year will be achieved, with a sustained annual benefit.
- 120 tonnes of obsolete POPs and non-POPs pesticides and related waste disposed of, and the use of products containing new POPs reduced by 30 tonnes.
- Mercury use in the ASGM sector reduced by 2 tonnes and the use of mercury containing consumer products reduced resulting in a 35 kg Hg/yr reduction, with a sustained annual benefit.

6) Innovativeness, sustainability and potential for scaling up.

NA. No changes since PIF.

Kindly refer to PART II - Project Justification of the original PIF (See Annex O to the UNDP-GEF Project Document) For additional information kindly refer to the UNDP-GEF Project Document - Chapter IV - Feasibility - Section iv: Sustainability and scaling up.

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

NA

⁶ 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..

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)? ⁷

Please refer to the UNDP-GEF Project Document - Chapter III: Results and Partnerships:

ii: Partnerships, including Table 1: Partner Table

iii: Stakeholder Engagement, including Table 2: Type of intended project beneficiaries/target groups and ways in which the project will engage them.

These two sections and tables provide an overview of the key stakeholders identified during project preparation and how these key stakeholders will be engaged during project implementation (including CSOs and indigenous people).

In Annex R, an overview has been provided of the people and entities consulted during project preparation (~ 180) including the dates during which consultations were held.

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 X%, men X%)? ⁸

Please also refer to the UNDP-GEF Project Document - Chapter III: Results and Partnerships, subsection iv: Mainstreaming Gender.

During the Project Preparation Phase of this Chemicals and Waste project, a gender analysis (see Annex S) was conducted by a national gender expert. The gender analysis (centered on sex and gender variables), allowed for the identification of the different roles and tasks that men and women perform and that put them at risk of exposure to the various hazardous chemicals that are expected to be addressed by this project. The gender assessment also identified irregularities and power relations, inequities and inequalities and helped to recognize the causes of these inequalities.

Subsequently, based on the outcomes of the gender analysis, a gender strategy was formulated to help design project interventions that would help overcome gender related gaps, and provide insight on how these interventions would affect the results and sustainability of the project.

In order to produce a gender strategy and mainstream gender into the project, the following activities were undertaken:

- Mapping of current Government policies and commitments pertaining to environment and gender equality.
- A gender-specific analysis of the program's areas of intervention.
- An analysis of project activities and GEF requirements.
- Gender gaps, which could be influenced by the project, were identified.
- Activities that can reduce gender gaps were proposed.
- Specific gender indicators were included in the Project's Results Framework (PRF), while other PRF indicators were made gender specific.

⁷ 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.

⁸ Same as footnote 8 above.

The gender analysis and strategy is too long to be incorporated in the CEO endorsement document or the UNDP-GEF Project Document and instead has been attached as Annex S to the Project Document. The gender analysis will be updated as part of the Mid-Term Review (MTR).

In addition:

1) Did the project conduct a gender analysis during project preparation? Yes. For a copy of the Gender Analysis kindly refer to Annex S of the UNDP-GEF Project document.

2) Did the project incorporate a gender responsive project results framework, including sex-dissagregated indicators? Yes. Kindly refer to Part I, Table B or the PRF taken up in the UNDP-GEF Project Document. Additional information to verify the gender responsiveness of the project results framework, can be found in the "Detailed Project Results Framework" which can be found in Annex S of the UNDP-GEF Project Document.

3) What is the share of women and men direct beneficiaries (women X% and men X%)? The total number of direct project beneficiaries is 31,187, of which 9,356 (30%) are expected to be female and 21,831 (70%) are expected to be male.

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):

Please refer to the UNDP-GEF Project Document - Chapter IV: Feasibility - Subsection ii. Risk Management - Table 3. Risk Table, which summarizes all the risks identified that might prevent the project objectives from being achieved, as well as presents the proposed mitigation measures that will address these risks at the time of project implementation.

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.

Institutional Arrangements: The institutional arrangements agreed upon with the Government of Ecuador and in particular the Ministry of Environment (MAE) (Implementing Partner for this project) and Ministry of Mines (MoM) (the Responsible Party for this project), have been described in detail in the UNDP-GEF Project Document - Chapter VII: Governance and Management Arrangement.

Coordination: At national level the project expects to coordinate with the following relevant GEF-financed and other initiatives:

- GEF/UNDP: “Integrated and Environmentally Sound PCBs Management in Ecuador” (GEF grant: 2,000,000 USD; co-financing: 7,800,000 USD). It is expected that the MAE/UNDP Project Team and members currently responsible for the implementation of the PCB project will be the ones responsible for this project as well, which would greatly enhance coordination between the two projects.
- GEF/UNIDO: “Enabling Activities to Review and Update the National Implementation Plan for the Stockholm Convention on Persistent Organic Pollutants (POPs)” (GEF grant: 205,000 USD; co-financing: 235,000 USD). The UNIDO project has not been launched yet, but it is being encouraged that the same expertise used for the elaboration of the UNDP project baseline is used for the NIP update. The UNDP project also aims to provide to the UNIDO NIP Update all relevant information that has been generated during the PPG POPs assessments and will come out of the following project Outputs: 2.1.1. "In-depth inventory of old and new POPs pesticides, non-POPs pesticides, pesticide contaminated sites and storage facilities"; 2.2.1 "Assessment of UPOPs generating processes/practices completed at seven (7) facilities (including 5.500 hectares of agricultural lands)"; and 2.3.1

"Ten (10) imported products suspected of containing new POPs (PFOs/c-otaBDE) analyzed to verify the existence of new POPs". Furthermore, the NIP update process might also generate data and information that might be useful for the UNDP project and inform baseline assessments and the selection of BEP/BAT interventions.

- CIRDI: "Transformation of artisanal and small-scale mining (ASM) in Ecuador" (2015 - 2017: 700,000 CAD). CIRDI is working directly with the Government of Ecuador through the Ministry of Mines to develop a long-term education and training program that will bring Canadian technical mining expertise and educational programming to Ecuador's small-scale miners. Throughout the PPG phase, the UNDP supported project had regular exchanges with the CIRDI project. During project implementation, the UNDP supported project will be able to benefit from the education and training program established by CIRDI and furthermore, will be able to feed the training materials developed as part of Component 3, back into the CIRDI training programme to ensure sustainability.

The following national projects and activities will provide co-financing to the GEF/UNDP project, as such close coordination with these activities will be ensured, these include:

- MAE Ecuador: "Zero Mercury Plan (2012 – 2020)" (funding from 2012 – 2017: 300,000 USD, 2017 – 2020: 300,000 USD). By September 2017, MAE expects to present the final results of a mercury inventory that is currently being conducted. The UNDP project will greatly benefit from the data obtained through the Zero Mercury Plan inventory that will inform project interventions supported as part of Component 1 and Component 3. In turn the UNDP project will also provide all the data and information obtained during the PPG phase and as part of the following project Outputs: 3.1.1 Comprehensive mercury baseline assessment (incl. sex disaggregated and gender specific data) completed for all ASGM project sites (Camilo Ponce Enríquez, Portovelo and Chinapintza) at a non-industrial level; and, 3.2.1 Comprehensive national mercury baseline assessment completed for medical devices and lighting products, and assessment conducted on impact on women/men.
- MAE: "National program for integral management of solid waste (PNGIDS)" (co-financing: 5,204,149 USD). The project will contribute to project components 1, 2 and 3.
- MAE: "Environmental and social repair program (PRAS)" (co-financing: 5,663,236 USD). The project will contribute to project components 1, 2, 3 and 4.
- MAE: "Integral and environmental management program in the puyango river basin (POAIP)" (co-financing: 16,944 USD). The project will contribute to project components 2 and 3.
- INIGEMM: "Improvement of working conditions for small-scale mining and artisanal mining" (co-financing: 3,540,833 USD). The project will contribute to project component 3.
- INIGEMM: "Geological research and availability of occurrences of mineral resources in the Ecuadorian territory" (co-financing: 5,219,824 USD). The project will contribute to project component 3.
- SENAGUA/International atomic energy agency (IAEA): "Strengthening of water quality management and control through the use of isotopic techniques in the Zamora river basin with mining influence" (co-financing: 195,403 USD). The project will contribute to project components 2 and 3.
- APCSA: "Integral management plan of plastic waste from Agricultural Use" (co-financing: 439,500 USD). The project will contribute to project component 2.
- INNOVAGRO: "Integral management plan of plastic waste from Agricultural Use" (co-financing: 558,873 USD). The project will contribute to project component 2.

At regional/global level the project expects to coordinate with the following relevant GEF-financed and other initiatives:

- GEF GOLD: "Global Opportunities for Long-term Development of ASGM Sector" (GEF grant: 45,262,294 USD; co-financing: 135,174,956 USD). Even though the Ecuador project is not part of the GEF GOLD programmatic approach, the Ecuador project will do its utmost throughout implementation to ensure that experiences and expertise from the countries participating in GEF GOLD (Burkina Faso (UNIDO), Colombia (UNDP), Guyana (Conservation International), Indonesia (UNDP), Kenya (UNDP), Mongolia (UNEP/UNIDO), Peru (UNDP), and Philippines (UNEP/UNIDO)) will be applied to improve the project's success in Ecuador, while at the same time results, lessons-learned and experiences from the Ecuador project will feed directly into the GEF GOLD global component on communications and knowledge management (managed by UNEP). One of the ways UNDP will ensure South-South and Triangular Cooperation with GEF GOLD is by grouping all UNDP ASGM projects under one Regional Technical Advisor (Panama), and use (whenever feasible) project expertise from one ASGM project country in another (e.g. by exchanging international and national experts) to ensure coherence and transfer of know-how. In addition, UNDP organizes on a yearly basis face-to-face South-South exchanges among all UNDP GEF Chemicals and Waste in the Latin American and the Caribbean region. These allow government counterparts, project coordinators and experts to exchange experiences and lead to long-term collaboration, exchanges and partnerships between projects and countries. The next of such meetings is expected to take place in April/May 2017 in which all UNDP-GEF projects with ASGM components (Colombia, Ecuador, Honduras and Peru) will participate.
- GEF/UNIDO: "Implementing Integrated Measures for Minimizing Mercury Releases from Artisanal Gold Mining" (GEF grant: 999,900 USD; co-financing: 2,676,764 USD). Although the project has already come to an end, the outcomes, lessons-learned and recommendations taken up in the Terminal Evaluation of the UNIDO project were used to design the UNDP supported ASGM components.
- GEF/UNEP/LATU: "Development of Mercury Risk Management Approaches in Latin America" (GEF grant: 916,000 USD; co-financing: 2,894,434 USD)
- GEF/UNDP/Honduras: "Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with their Final Disposal" (GEF Grant: 3,460,000 USD; co-financing: 10,420,000 USD).
- GEF/UNDP/Colombia: "Reducing UPOPs and Mercury Releases from Healthcare Waste Management, e-Waste Treatment, Scrap Processing and Biomass Burning" (GEF Grant: 5,800,000 USD; co-financing: 32,915,018 USD)

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)?

Reduced exposure to harmful chemicals, including POPs and mercury that impact human health at local, regional and global level.

Impact on human health can result in human suffering, will result in healthcare costs that have to be born by the sick individual (and his/her family) as well as the government's healthcare system, lost productivity/workdays (sick leave taken by those that are unable to work, either because they are sick/disabled themselves or because they are taking care of sick loved ones), etc.

Reducing/minimizing the release of harmful substances like POPs and mercury will help minimize impact on human and environmental health at local, regional and global level, and support socio-economic benefits, such as health, low healthcare costs, ability to work, among others.

To achieve this, the project will support the disposal and reduction of POPs releases (disposal of 30 tonnes of pesticides, treatment of 90 tonnes of pesticide contaminated empty pesticide containers, remediation/clean-up of pesticide contaminated site, reduction in the use of new POPs by 30 tonnes, remediation/clean-up of UPOPs contaminated site, UPOPs releases reduced by 25 grams TEQ), and mercury (use of mercury in ASGM reduced by 2 tonnes, use of mercury in products reduced by 35 kg/yr, 10 tonnes of waste containing mercury disposed of).

In total the project aims to reduce the risk of hazardous chemicals and waste for 31,187 direct project beneficiaries (9,356 of females and 21,831 of males).

- Reduced exposure to harmful chemicals, including POPs and mercury that impact the environment and productive activities relying on the environment at local, regional and global level.

The release of harmful chemicals, such as POPs and Hg have a detrimental impact on the environment which in turn impacts economic activities which are reliant on the use of natural resources.

For example, ASGM mining operations in Ecuador are typically located within mountainous regions surrounding deep valleys. The two principal river basins impacted by ASGM activity in Ecuador are the Puyango Basin (shared with Peru; affected waters in Zaruma and Ponce Enriquez drain through this basin to the Pacific coast) and the Amazon Basin (shared with Brazil; affected waters in Nambija drain through this basin to the Amazon river and eventually to the Atlantic coast). When mercury is used in ASGM practices a large portion of it eventually ends up in waterways and in the case of Ecuador is transported to coastal lowland plains where intense agricultural activity exists. This includes bananas, cocoa, coffee and rice farms. The pollution also enters the estuarine region at the Pacific coast, where mangrove ecosystems support diverse edible species including molluscs, fish and crustaceans, including intensive shrimp aquaculture that constitutes an important element of Ecuador's exports. Mercury pollution of the food chain would not only have an impact on human health, but would eventually also reduce the opportunity for Ecuador to export its products abroad as external buyers markets are paying more and more attention to the content of harmful chemicals in food and consumer products.

The project aims to reduce the use and release of POPs and mercury, and will in this manner safeguard the environment from exposure to such chemicals, and thus also minimize the impact this would have on economic activities that rely on the environment and its natural resources, whether in Ecuador or elsewhere.

- Creation of new jobs. The project aims to create 80 new jobs (24 jobs for females and 56 jobs for males) through solutions for the management of chemicals and waste. In addition to jobs created by the project (e.g. project consultancies, Competitive Fund Mechanism - CFM) project partners will also fund the creation of new jobs that will include for example positions such as ASGM pilot plan operators and trainers.
- Increased access to finance for the ASGM sector, increased gold yields and better gold prices. Through several measures the project aims to increase access to finance (loans) for the ASGM sector, which in turn is expected to allow the ASGM sector to make technology investments and improvements that would lead to an increase in gold recovery (and thus higher incomes), while reducing the use of mercury. These measures include the development/improvement of a financial product that serves the ASGM sector (in partnership with a financial institution) and the establishment of a Competitive Fund Mechanism (CFM) that will finance five (5) environmental and social entrepreneurs and technology innovations within the ASGM.

Furthermore, the project aims to sign an agreement with a legal gold buyer, which is expected to result in responsibly produced gold (10 % produced by women) being purchased from project beneficiaries at a higher price.

- Industry incentives developed that support conversion to processes which pose less risks and result in less harmful products. To support industry to meet more stringent regulations and remain competitive in their field,

the project will develop 2 industry incentives and propose them for further implementation, which would support conversion to processes which pose less risks and result in less harmful products.

In addition, the project will also support 2 plants (1 ASGM processing plants and 1 industry) to make use of existing tax incentives to finance cleaner production systems, to showcase to other industries what the benefits of using such tax incentives would be.

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.

Please refer to the UNDP-GEF Project Document - Annex T - Knowledge Management Strategy which summarizes the knowledge management approach the project is going to take, the KM products the project anticipates to develop in a user-friendly form, and lists other relevant projects and initiatives the project aims to learn from (which are also listed under A6.).

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 assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:

The information provided below is almost entirely the same as taken up in the original PIF, as the consistency of the Project with National Priorities has not changed since PIF submission:

The Republic of Ecuador signed the Stockholm Convention on August 28, 2001 and ratified the Convention on June 7, 2004. The country's first National Implementation Plan (NIP) for the implementation of the Stockholm Convention was prepared with assistance of the GEF as part of a regional UNEP programme and submitted to the Stockholm Convention Secretariat in September 2006. Subsequently a NIP update with support from the Swiss Development Cooperation (SDC), UNEP and the GEF was finalized and submitted in June 2009. Ecuador will start its NIP update process in 2017 (with GEF and UNIDO support) to include newly listed POPs.

The strategic objectives and main programmes of the most recent available NIP (2009) are listed below.

Strategic Objectives and Main Programmes of the NIP:

1. Institutional Strengthening

Objective: Strengthen the institutional framework and coordination between different actors to support the implementation of strategies and intervention for POPs.

1.1 Policy Strengthening.

Objective: Adapt and supplement the framework pertaining to the regulations of POPs.

1.2 Strengthening of Monitoring and Evaluation Capacity.

Objective: Strengthen organizations involved in the monitoring and control of POPs.

2. Continuous Improvement in the Management of POPs

Objective: Manage in an Environmentally Sound Manner POPs stockpiles, waste sites stocks, contaminated sites and unintentional releases of POPs.

2.1 Continuous improvement of the management of PCBs.

Objective: Remove in an environmentally sound manner existing stockpiles of PCBs contained in oils, equipment and wastes by 2025.

2.2 Continuous improvement of the management of POPs pesticides.

Objective: Eliminate in an environmentally sound manner obsolete POPs pesticides and non-POPs obsolete pesticides and prevent the generation of new stocks.

2.3 Reducing emissions of unintentionally produced POPs.

Objective: Reduce emissions of dioxins and furans.

2.4 Management of Contaminated Sites.

Objective: Identify and manage POPs and non-POPs contaminated sites and prevent the generation of new contaminated sites.

3. Information generation, Awareness Raising, Conducting Training and Research

Objective: Create awareness among different groups of society on the risks associated with POPs.

3.1 Information management, creating awareness and undertaking research.

Objective: Manage information, promote research, raise awareness and train different groups of society on the risks associated with POPs.

The proposed project is entirely in line with the Ecuador NIP and addresses all of its 3 strategic objectives as well as 6 of the 7 programmes prioritized in the NIP. The only programme intervention not covered by the proposed project (2.1) is already taken care of by the GEF/UNDP project “Integrated and Environmentally Sound PCBs Management in Ecuador” which is currently under implementation.

As such it can be concluded that the proposed project is entirely consistent with Ecuador’s National Strategies pertaining to POPs.

The Republic of Ecuador signed the Minamata Convention on Mercury on October 10, 2013. With an Executive Decree (No. 988) the President of Ecuador ratified all articles of the Minamata Convention on Mercury on April 8, 2016. With the support of UNITAR, Ecuador developed a national inventory of mercury releases in 2008 (an update is expected to be published by September 2017). This mercury release inventory identified the country’s two main mercury release sources as: Products containing Mercury (37,080.75 kg Hg/yr) and Primary Production of Metals (4,931.47 kg Hg/yr) (Artisanal and Small Scale Gold Mining - ASGM). Ecuador’s national Zero Mercury Plan (2013) therefore predominantly focuses on measures to reduce mercury from these two sources. As the proposed project aims to reduce mercury releases from both ASGM as well mercury in consumer products, the proposed project can thus be considered entirely consistent with national mercury reduction priorities.

C. DESCRIBE THE BUDGETED M & E PLAN: Please refer to the UNDP-GEF Project Document - Chapter VI: Monitoring & Evaluation (M&E) Plan, including Table 4. Mandatory GEF M&E requirements & M&E Budget, which describe in full the budgetted M&E Plan.

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies⁹ 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		04/25/2017	Ms. Xiaofang Zhou Director MPU/Chemicals	+1 (212) 906- 5782	xiaofang.zhou@undp.org

⁹ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT
GEF6 CEO Endorsement /Approval Template-August2016

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).

Please refer to the UNDP-GEF Project Document - Chapter V: Project Results Framework (page 33 - 39).

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 the UNDP-GEF Project Document - Annex D: GEF SEC and STAP comments, in which GEF SEC and STAP comments have been responded to.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS¹⁰

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

PPG Grant Approved at PIF: 200,000			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF/CBIT Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Definition of Baselines and Pilot Projects	60,413	60,413	
Definition of a Gender Strategy	15,800	15,800	
Definition of a Finance Strategy	14,300	14,300	
Development of the Management Arrangements Strategy and M&E schemes	28,962	28,962	
Preparation of ProDoc and Annexes	49,736	41,451	8,285
Stakeholder consultation	30,789	30,789	
Total	200,000	191,715	8,285

¹⁰ 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/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)