

PROJECT IDENTIFICATION FORM (PIF)¹ **PROJECT TYPE: Full-sized Project TYPE OF TRUST FUND:GEF Trust Fund**

PART I: PROJECT IDENTIFICATION

| Project Title: | Development of National Capacity for the Environmentally Sound Management and Disposal of PCBs | | |
|---|---|------------------------------|------------|
| Country(ies): | Colombia | GEF Project ID: ² | 4417 |
| GEF Agency(ies): | UNDP (select) (select) | GEF Agency Project ID: | 4356 |
| Other Executing Partner(s): | | Submission Date: | 2011-08-01 |
| GEF Focal Area (s): | Persistent Organic Pollutants | Project Duration(Months) | 48 |
| Name of parent program (if applicable): ▹ For SFM/REDD+ | | Agency Fee (\$): | 340,000 |

A. FOCAL AREA STRATEGY FRAMEWORK³:

| Focal Area Objectives | Expected FA Outcomes | Expected FA Outputs | Indicative Financing from relevant TF (GEF/LDCF/SCCF) | Indicative Cofinancing (\$) |
|-----------------------|--|--|--|-----------------------------------|
| (select) CHEM-1 | 1.4 POPs waste prevented, managed and disposed of. | Indicator 1.4.1: Amount of PCBs and PCB-related wastes disposed of, or decontaminated; measured in tons as recorded in the POPs tracking tool | (\$) 2,080,000 | 9,000,000 |
| (select) CHEM-1 | 1.5 Country capacity built to effectively phase out and reduce releases of POPs. | Indicator 1.5.2: Progress in developing and implementing a legislative and regulatory framework for environmentally sound management of POPs, and for the sound management of chemicals in general, as recorded through the POPs tracking tool. | 1,150,000 | 4,098,781 |
| (select) (select) | | | | |
| (select) (select) | | | | |

It is very important to consult the PIF preparation guidelines when completing this template.
 Project ID number will be assigned by GEFSEC.

 $^{^{3}}$ Refer to the reference attached on the Focal Area Results Framework when filling up the table in item A.

| (select) (select) | | | | |
|--------------------------------------|--------|---|-----------|------------|
| (select) (select) | | | | |
| (select) (select) | Others | | | |
| Project management cost ⁴ | - | - | 170,000 | 500,000 |
| Total project costs | | | 3,400,000 | 13,598,781 |

⁴ GEF will finance management cost that is solely linked to GEF financing of the project.

B. PROJECT FRAMEWORK

Project Objective: Increase national capacity to identify, manage and dispose of existing PCBs in Colombia in an environmentally responsible manner in order to meet Stockholm Convention country commitments and minimize the risks to the population and the environment posed by PCB exposure.

| Project Component | Grant Type (TA/IN V) | Expected Outcomes | Expected Outputs | Indicative Financing from relevant TF (GEF/LDCF/SCCF) (\$) | Indicative Cofinancing (\$) |
|--|-------------------------------|--|---|---|-----------------------------------|
| 1. Strengthening the legal, administrative and regulatory framework for the sound management of PCBs. | ТА | A. Adjusted regulatory framework adopted and widely disseminated. | A1. A regulatory framework for the environmentally sound management of PCBs developed. | 300,000 | 900,000 |
| | | | A2. Outreach strategy on the new regulatory framework. | | |
| | | B. Instruments to promote the elimination of PCBs proposed. | B1. Evaluation of feasibility of applying economic, financial or market instruments to promote environmentally sound management and disposal of PCB. | | |
| | | C. Technical capacity for enforcement of PCBs developed. | C1. Training program for the local environmental, health, police, transport, customs control staff and other authorities on the new regulatory framework and the negative impacts of inappropriate PCB management. | | |
| | | | system for the identification of PCBs in equipment. C3. Import | | |

| | | | control system for | | |
|-----------------------|----|--------------------|---------------------|---------|-----------|
| | | | transformers, | | |
| | | | capacitors and | | |
| | | | dielectric oil | | |
| | | | established to be | | |
| | | | enforced by | | |
| | | | customs and | | |
| | | | foreign trade | | |
| | | | authorities. | 400.000 | 4 000 000 |
| Z. Development of | IA | D. Information | D1. Information | 480,000 | 4,000,000 |
| petional capacity for | | managa PCBs | system to | | |
| environmentally | | established | disseminate and | | |
| sound management | | established. | update in an | | |
| and disposal of | | | orderly and | | |
| PCBs. | | | periodic manner, | | |
| | | | the data related to | | |
| | | | the inventory and | | |
| | | | management of | | |
| | | | PCBs in the | | |
| | | | country. | | |
| | | E. Quality | E1. Protocols for | | |
| | | standards to | sampling and | | |
| | | monitor PCBs | analysis of PCBs | | |
| | | and a reference | in different | | |
| | | laboratory for | matrices (oil, | | |
| | | PCBS | water, soil, air, | | |
| | | established. | breast milk) | | |
| | | | oreast mirk). | | |
| | | | E2. Monitoring | | |
| | | | program for PCB | | |
| | | | and contaminated | | |
| | | | sites management | | |
| | | | pians. | | |
| | | | E3. Strengthening | | |
| | | | of IDEAM | | |
| | | | laboratory to | | |
| | | | national reference | | |
| | | | laboratory for | | |
| | | | PCBs, Dioxins | | |
| | | | and Furans. | | |
| | | | (IDEAM: Institute | | |
| | | | of Hydrology, | | |
| | | | Meteorology and | | |
| | | | Environmental | | |
| | | | Studies in | | |
| | | | Colombia) | | |
| | | | E4. Quality | | |
| | | F Technical | standards and | | |
| | | guidelines for the | program for | | |
| | | environmentally | laboratories that | | |
| | | sound | work with PCBs. | | |

| management of | | |
|--------------------|----------------------|--|
| PCBs established | F1. Guidelines | |
| and disseminated | and standards for | |
| to stakeholders. | environmentally | |
| | sound | |
| | sound | |
| | management of | |
| | PCBs (oil and | |
| | contaminated | |
| | equipment) during | |
| | maintenance of | |
| | equinment | |
| | transmentetien | |
| | transportation, | |
| | storage and | |
| | disposal, | |
| | including | |
| | occupational | |
| | health and safety | |
| | issues | |
| | 100000. | |
| | EQ Mada 1 | |
| | F2. National | |
| | training program | |
| | on the new | |
| | standards, | |
| | guidelines and | |
| | regulations for | |
| | stakeholders | |
| | involved in the | |
| | how dling of DCDs | |
| | nandling of PCBs | |
| | (maintenance | |
| | companies, | |
| | junkyards and | |
| | recycling plants, | |
| | large consumers | |
| G Technical | and industries | |
| G. Teeninear | and industries, | |
| guidennes for | | |
| risk assessment | and industrial | |
| of equipment | users among | |
| contaminated | others). | |
| with PCBs | | |
| developed. | F3. Needs | |
| 1 | assessed to | |
| | expand the | |
| | number of | |
| | authorize 1 | |
| | authorized | |
| | operators for the | |
| H. Strategy for | management of | |
| the identification | equipment or oils | |
| and management | containing PCBs. | |
| of sites | Ŭ | |
| contaminated | G1. Definition of | |
| with PCRs | criteria to identify | |
| ostablished | prioritize and | |
| established. | prioritize and | |
| | remove from use | |
| | equipment located | |
| | in high risk areas, | |
| | in accordance | |
| I. Current PCB | with the | |
| inventory refined | provisions of the | |
| | | |

| | | and PCB | Stockholm | | |
|-----------------------|----|---------------------------|--------------------|-----------|-----------|
| | | inventory and | Convention. | | |
| | | disposal plan | | | |
| | | prepared for | H1. Technical, | | |
| | | other sectors not | environmental and | | |
| | | previously | health guidelines | | |
| | | identified and for | for the | | |
| | | zones not | management of | | |
| | | connected to the | sites contaminated | | |
| | | national grid | with PCBs | | |
| | | (ZNI) | including canacity | | |
| | | (21(1)). | building to apply | | |
| | | | these guidelines | | |
| | | | these guidennes. | | |
| | | | I1 Program to | | |
| | | | identify and | | |
| | | | address other | | |
| | | | soctors and items | | |
| | | | (other then these | | |
| | | | (other than those | | |
| | | | that have evicting | | |
| | | | that have existing | | |
| | | | SIOCKS OI | | |
| | | | equipment and / | | |
| | | | or materials | | |
| | | | contaminated with | | |
| | | | PCBs, with | | |
| | | | content exceeding | | |
| | | | 50 ppm. | | |
| | | | 12 Program for | | |
| | | | 12. Flogram 101 | | |
| | | | | | |
| | | | (analysis, | | |
| | | | inventory) and | | |
| | | | environmentally | | |
| | | | sound | | |
| | | | management of | | |
| 3 | ΤΛ | I All project | PCBS III ZINI. | 2 380 000 | 8 108 781 |
| 5. Environmentally | | elements | with PCRs | 2,580,000 | 0,170,701 |
| cound monogement | | elements portaining to | holdors to | | |
| sound management | | pertaining to | domonstrate the | | |
| and disposal of | | PCB | demonstrate the | | |
| PCBs through | | management and | operation, | | |
| demonstration | | disposal tested | maintenance, | | |
| projects. | | on real cases of | uisposai and | | |
| | | PCB removal | storage of PCBs | | |
| | | and disposal. | in accordance | | |
| | | As a result of the | with new | | |
| | | test, adjustments | standards, rules | | |
| | | and | and regulations | | |
| | | improvements | established. | | |
| | | are made where | | | |
| | | required. | J2. Partnering | | |
| | | | with at least two | | |
| | | | interested | | |
| | | | technology | | |
| | | | providers to | | |
| | | | evaluate two | | |
| | | | alternatives for | | |

| | | | the | | |
|---------------------|----|-------------------|---------------------|--------|----------|
| | | | decontamination | | |
| | | | and disposal of | | |
| | | | equipment | | |
| | | | contaminated with | | |
| | | | low concentration | | |
| | | | of PCB. Obtain | | |
| | | | from these | | |
| | | | demonstrations | | |
| | | | the information to | | |
| | | | determine the | | |
| | | | technical | | |
| | | | economical and | | |
| | | | environmental | | |
| | | | | | |
| | | | apply disposal | | |
| | | | technologies | | |
| | | | fitting country | | |
| | | | fitting country | | |
| | | | requirements. | | |
| | | | 13 Domonstration | | |
| | | | J5. Demonstration | | |
| | | | project for FCD | | |
| | | | diamage light | | |
| | | | disposal of | | |
| | | | in high priority | | |
| | | | In high priority | | |
| | | | areas identified in | | |
| | | | the country, as | | |
| | | | established in the | | |
| | | | Stockholm | | |
| | | | Convention. | | |
| | | | IA Elization of | | |
| | | | J4. Elimination of | | |
| | | | 000 tons of PCBs | | |
| | | | through exports | | |
| | | | and demonstration | | |
| | | | projects. | | |
| | | | 15 Enclosed on of | | |
| | | | J5. Evaluation of | | |
| | | | the capacity to | | |
| | | | replicate the | | |
| | | | demonstration | | |
| 1 Monitorin - | TA | 1 1 Droigot's | 1 1 1. Mer and | 70.000 | <u> </u> |
| 4. Monitoring, | IA | 4.1. Project's | 4.1.1: M&E and | /0,000 | 80,000 |
| fearing, adaptive | | results sustained | adapuve | | |
| feedback, outreach, | | and replicated | management | | |
| and evaluation | | | applied to project | | |
| | | | in response to | | |
| | | | needs, mid-term | | |
| | | | evaluation | | |
| | | | lindings with | | |
| | | | lessons learned | | |
| | | | extracted. | | |
| | | | 4.1.2: Lessons | | |
| | | | learned and best | | |
| | | | practices are | | |
| | | | disseminated at | | |
| | | | national level | | |

| (select) | | |
|--------------------------------------|-----------|------------|
| (select) | | |
| Project management Cost ⁵ | 170,000 | 420,000 |
| Total project costs | 3,400,000 | 13,598,781 |

C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

| Sources of Cofinancing | Name of Cofinancier | Type of Cofinancing | Amount (\$) |
|------------------------|--|---------------------|-------------|
| Private Sector | CODENSA (Electricity generators, distribution companies, investors and other PCB holders) | Grant | 7,086,330 |
| Private Sector | EMGESA SA ESP (Electricity generators, distribution companies, investors and other PCB holders) | Grant | 512,451 |
| Private Sector | Grupo Empresarial EPM (Electricity generators, distribution companies, investors and other PCB holders) | Grant | 5,500,000 |
| National Government | Project Government Contribution | In-kind | 500,000 |
| (select) | | (select) | |
| Total Cofinancing | | | 13,598,781 |

⁵ Same as footnote #3.

| GEF Agency | Type of Trust Fund | Focal area | Country name/Global | Project amount (a) | Agency Fee (b) ² | Total c=a+b |
|---------------|-----------------------|------------|------------------------|--------------------------|--------------------------------|----------------|
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| (select) | (select) | (select) | | | | 0 |
| Total Crant | Recources | | | 0 | 0 | 0 |

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

 Total Grant Resources
 0
 0
 0

 ¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table
 2

 ² Please indicate fees related to this project.
 3
 3

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 THE GEF FOCAL AREA STRATEGIES:

The project and its activities are consistent with the GEF-5 Chemicals Results Framework's main goal "to promote the sound management of chemicals throughout their life-cycle in ways that lead to the minimizations of significant adverse effects on human health and the global environment."

In particular, the present project will contribute to Objective 1 "*Phase Out POPs and Reduce POPs Releases*" through the following interventions:

| Relevant GEF-5 Strategy Indicator | Project's contribution |
|---|--|
| Outcome 1.4: POPs waste prevented, mana | ged and disposed of |
| Indicator 1.4.1 Amount of PCBs and | Project Component 3: "Environmentally sound |
| PCB-related wastes disposed of, or | management and disposal of PCBs through demonstration |
| decontaminated; measured in tons as | projects" will achieve the disposal of 600 tons of PCBs |
| recorded in the POPs tracking tool. | disposed off and will remove existing barriers to provide |
| | the conditions for the environmentally sound disposal of |
| | the remaining PCBs in the country. |
| Outcome 1.5: Country capacity built to effe | ectively phase out and reduce releases of POPs |
| Indicator 1.5.2 Progress in developing | Project Component 1: "Strengthening the legal, |
| and implementing a legislative and | administrative and regulatory framework for the sound |
| regulatory framework for | management of PCBs" will strengthen the legal framework |
| environmentally sound management of | for the management of PCBs and will further strengthen the |
| POPs, and for the sound management of | ability of monitoring compliance by the local authorities at |
| chemicals in general, as recorded through | national, regional and local levels. |
| the POPs tracking tool | |
| | Project Component 2: "Development of national capacity |
| | for the environmentally sound management and disposal of |
| | PCBs" will create an electronic platform to manage PCB |
| | inventories; create a reference laboratory for PCBs; |
| | establish and disseminate technical guidelines for the |
| | environmentally sound management of PCBs and for risk |
| | assessment of PCB contaminated equipment; establish a |
| | strategy for the identification and management of sites |
| | contaminated with PCBs; and, will refine inventories with |
| | emphasis on the preparation of specific disposal plans for |
| | sectors with presence of PCBs not previously identified and |
| | those located in Not-Interconnected-Zones. |

A.1.2. FOR PROJECTS FUNDED FROM LDCF/SCCF: THE LDCF/SCCF ELIGIBILITY CRITERIA AND PRIORITIES: N.A.

A.2. NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS, IF APPLICABLE, I.E. NAPAS, NAPS, NBSAPS, NATIONAL COMMUNICATIONS, TNAS, NIPS, PRSPS, NPFE, ETC.: Colombia signed the Stockholm Convention on 23 May 2001 and ratified it on 22 October 2008. With support of the IBRD its National Implementation Plan (NIP) was finalized and submitted in July 2010.

The NIP identifies the environmentally sound management and disposal of PCBs as one of the main priorities for the implementation of the Stockholm Convention. As such, the present project has been developed to address national needs and challenges with respect to the environmentally safe and sound management of PCBs throughout their life-cycle (as identified in the PCB inventory as well as in the NIP). The proposed project will be based upon a methodology applied in Mexico, Brazil and Uruguay, which received very positive feedback from power companies and PCB holding entities.

In addition, the project will also serve to strengthen foundational capacities for chemicals management within the country and provide a valuable means by which to link the PCB work to Colombia's broader national chemicals management agenda. This, in turn, will serve to support the GEF's strategic aim to promote the sound management of chemicals for the protection of human health and the environment, and to contribute to the overall objective of the Strategic Approach to International Chemicals Management (SAICM) of achieving the sound management of chemicals throughout their life-cycle so that by 2020 chemicals are used and produced in ways that lead to the minimization of significant adverse effects of human health and the environment.

Colombia's National Development Plan (NDP) 2006 - 2010 ("Estado comunitario: Desarrollo para todos" [Community-based State: Development for All]) recommends policy approaches in five main areas: (i) Social peace and democratic security; (ii) Poverty reduction and promotion of employment and equity; (iii) Competitiveness; (iv) Environmental management; and (v) Modernization of the State to serve the citizens.

National priorities pertaining to environmental management have been identified as:

- Integrated management of water resources
- Prevention and control of environmental degradation to reduce social costs
- Strengthening of SINA's environmental governance capacity
- Incorporating risk reduction strategies into development planning (prevention and mitigation)
- Development of financial strategies for risk transfer and reduction with respect to fiscal vulnerability

The proposed project will contribute to national priorities as identified by Colombia's NDP through i) prevention and control of environmental degradation and reduction of the social costs by achieving the environmentally sound management and disposal of PCBs, ii) Strengthening of SINA through capacity building for the environmentally sound management and disposal of PCBs; and, iii) improved risks reduction strategies through strengthening the legal, administrative and regulatory framework for the sound management of PCBs.

B. PROJECT OVERVIEW:

B.1. DESCRIBE THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:

Colombia identified one of main priorities in the NIP as the environmentally sound management and destruction of PCBs. Some relevant facts associated with PCB management (identified during studies conducted as part of the preparation of the NIP, as well as national expertise pertaining to POPs management) are the following:

• Use and storage of large quantities of PCBs, especially in the power sector, oil and manufacturing (between 10,073 and 13,199 tons, spread over almost the entire national territory).

- With the exception of some environmental authorities, most do not have clear and accurate information on the contaminated areas, location and storage conditions of PCBs.
- Existence of transformers in use that are potentially contaminated with PCBs within the national interconnected system⁶ (from 9771 to 12,803 transformers, mostly located at risk areas).
- 66% of the national territory corresponds to zones not interconnected to the national grid, served by more than 70 electricity utilities facing economic and geographical difficulties to maintain proper inventories, management and disposal of PCBs.
- Storage sites for oils, transformers and equipment contaminated with PCBs, potentially contaminated, but not yet identified or confirmed.
- Existence of contaminated sites or suspected contaminated sites that are not receiving any type of management (soil and groundwater contamination).
- Lack of technical capacity installed in the country for treatment and/or environmentally sound disposal of PCBs
- Service is provided by external maintenance companies in most of the cases without any analysis of the equipment generating crossed contamination.
- PCBs and other chemicals control and monitoring are dispersed at the institutional level and there are not appropriate thresholds established based on risk assessments.

QUANTITY TOTAL (T) METHODOLOGY **PCB** SOURCES **(T)** USED Estimated existence of pure PCB contained in transformers **no longer in service** at the national 683 level. 1.231 Estimated existence of pure PCB contained in transformers **currently in service** at the national 548 level Statistical Estimated existence of PCB contaminated estimation transformers **no longer in service** at the national 302 to 396 Between level. 10.073 and Estimated existence of PCB contaminated 13.199 9.771 to transformers currently in service at the national 12.803 level. Direct 927 collection, Existences of PCB contaminated equipment, oils 927 and waste reports and formulaires PCB imported to the country in oils and 20 20 in equipment Available Condensers imported to the country before 1985, Records 3.863 probably containing PCBs 3,863

More detail on the amount of PCBs in the electrical and manufacturing sectors in presented below:

As described above, the estimated existences of PCBs between 10,073 and 13,199 tons correspond to contaminated transformers (out of them around 97% are still in service and 3% are no longer in service).

⁶ Interconnected system refers to the areas connected to the national grid. Not-Interconnected-Zone (ZNI) are remote areas where electricity distribution is not connected to the national grid but provided by small electricity distributors.

According to the projections made, around 7% of the total number of transformers in the country is likely to be contaminated with PCBs. Approximately 80% of those belong to the electric sector, 18% belong to the manufacturing sector, 1.5% to mining and hydrocarbons and the remaining ones are used in other activities.

The government is currently working in the harmonization of the legal framework for chemicals and raising awareness on the stakeholders about the need to comply with the Convention obligations. However in order to make compliance with the commitments on PCBs it is necessary to establish a comprehensive plan to face the issues above and strengthen the capacity of authorities and stakeholders handling PCBs at all their life cycle stages. Some of the barriers identified during the preparation of inventories for the handling and proper disposal of PCBs were the following:

- Lack of establish specific regulatory developments in various topics related to PCB management to complement existing laws.
- Lack of knowledge and awareness on the problem of PCBs for users, entrepreneurs, employers and populations at risk.
- Lack of guidelines for the maintenance of transformers to avoid exposure to PCBs, cross contamination, soil pollution and waste management resulting from the maintenance of transformers.
- Need to evaluate the laboratories for PCB analysis procedures, equipment and methodologies to ensure the reliability of their results and compliance with standards to be established.
- Storage of PCBs without the minimum conditions of environmental security, unattended and unprotected soil and disposal of transformers without detection of possible presence of PCB.
- Difficulty of access and communication in areas affected by conflict.
- Lack of a consistent labeling makes identification and tracking difficult.
- High costs to eliminate PCB.
- Lack of approved facilities for disposal or decontamination of PCB transformers, leaving export as only option.

The present project contains specific activities intended to remove the barriers exposed. GEF funds would allow the Government of Colombia to establish an enabling environment and remove existing barriers to the elimination of PCBs, through:

<u>1.</u> <u>Strengthening the legal, administrative and regulatory framework for the sound management of PCBs</u>. This component aims to build capacity at the government entities at the national, regional and local levels that have the mandate and responsibility to ensure the environmentally sound management of POPs. This is done by harmonizing and developing the legal and administrative framework and policy to guide the environmentally sound management of POPs, suggesting possible instruments that promote the reduction and elimination of PCBs, and strengthening the administrative and technical capacity of the institutions responsible for monitoring and verifying compliance with the established norms for PCB management and disposal.

2. <u>Development of national capacity for the environmentally sound management and disposal of PCBs</u> <u>This component aims to facilitate hands-on management of PCBs by PCB holders (mainly the electricity</u> sector, oil and manufacturing) giving special emphasis to risk prevention and mitigation. It comprises the creation of an electronic platform to manage the inventory, establishment and dissemination of quality standards, the creation of a reference laboratory for PCBs, establishment and dissemination of technical guidelines for the environmentally sound management of PCBs and for risk assessment of PCBcontaminated equipment, establishment of a strategy for the identification and management of sites contaminated with PCBs, and finally the refinement of inventories with emphasis in the preparation of inventories and disposal plans for sectors with presence of PCBs not previously identified and in Not-Interconnected-Zones.

3. Environmentally sound management and disposal of PCBs through demonstration projects

This component will include demonstration projects that will serve to test all the elements introduced for the sound management and disposal of PCBs (regulations, standards, guidelines, strengthened labs, risk assessment methodologies and potential disposal technologies among others). Although they touch all the areas mentioned above, they are focused on two particular issues considered of special importance to the country: evaluation of technologies for disposal of PCB and addressing equipment located in high priority areas identified in the country, as established in the Stockholm Convention.

Concerning disposal technologies currently there are companies interested to invest in the country on this area and the demonstration aims to establish partnerships with potential investors already identified to evaluate at least two different technologies. This will contribute to create the capacity of disposal in the country and will help the government to obtain the information to determine the technical, economical and environmental requirements to apply disposal technologies in the specific conditions of the country.

With the combination of the three pillars above, the project aims to remove the barriers to provide the conditions for the environmentally sound management of PCBs. The demonstration projects and additional exports of pure PCB will have the impact of eliminating around 600 tons of PCBs. The specific products proposed to strengthen the legal framework and the authorities, and to develop the PCB holders' capacity to handle the PCBs, will create the enabling environment for additional impact in the long term to comply with the Convention targets.

The 600 tons of PCB expected to be eliminated during the Project implementation correspond to PCB contaminated transformers and oils mostly from the electric and manufacturing sectors. The overall amounts of PCB containing and PCB contaminated equipment will be verified during the PPG stage as well as the exact sources for the 600 tons of PCBs to be disposed of during the demonstration.

B. 2. <u>INCREMENTAL /ADDITIONAL COST REASONING</u>: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) OR ADDITIONAL (LDCF/SCCF) ACTIVITIES REQUESTED FOR GEF/LDCF/SCCF FINANCING AND THE ASSOCIATED <u>GLOBAL ENVIRONMENTAL BENEFITS</u> (GEF TRUST FUND) OR ASSOCIATED ADAPTATION BENEFITS (LDCF/SCCF) TO BE DELIVERED BY THE PROJECT:

As described in section B. 1, currently, PCBs in Colombia are not managed or disposed of in an environmentally sound manner. Most stakeholders involved in the handling of PCBs are not aware of the risks involved and how to mitigate them. At national level no legal framework, guidelines or standards exist to help guide companies to follow safe practices and there are no options or facilities available to allow for the environmentally sound disposal of PCBs. As such, conditions in Colombia to manage and eliminate PCBs in an environmentally safe and organized manner can be considered as 'non-existent'.

These conditions are very unlikely to change without funding from the Global Environment Facility (GEF). The government is currently working in the harmonization of the legal framework for chemicals and raising awareness on the stakeholders about the need to comply with the Convention obligations. However in order to make compliance with the specific commitments on PCBs it is necessary to establish a comprehensive plan to face the issues above and strengthen the capacity of authorities and stakeholders handling PCBs at all their life cycle stages. In a business-as-usual scenario, Colombia would be unable to comply with the Stockholm Convention with respect to the management and disposal of PCBs, as a consequence those involved in the handling of PCBs, communities living close to PCB contaminated areas as well as the global environment will remain at risk from PCBs. The incremental activities proposed in the project are addressed to tackle the barriers identified to establish an orderly and systematic environmentally sound management and destruction of PCBs, supported by law and made possible through the strengthening of the local technical and institutional capacity. This will ensure

compliance with the Stockholm Convention commitments on PCBs in a way that environmental and health risks are properly managed.

The project proposed represents a cost effective way to achieve this goal it will take advantage of all the effort that the country has already invested in the issue and build from there; for instance, it will help strength an already existing regulatory framework on chemicals, it will create an appropriate information platform to manage PCBs based on already existing inventories, it will strength the already existing institutions and labs involved in the PCB management. Furthermore, instead of funding the extraction and disposal of PCBs (costly according to calculations undertaken as part of the PCB inventory) GEF funding will be applied as seed capital to enable stakeholders to subsequently proceed with the conversion and disposal of PCBs themselves making use of financially viable PCB disposal technologies and conditions as put in place as part of the project. As such the only 'direct' disposal of PCBs, as part of the project's demonstration component, will be funded through with GEF funding, which will be used as example to show the established conditions to facilitate safe PCB handling for replication . These investments will lay the groundwork for Colombia's total PCB elimination in the long run, and can thus be considered very cost-effective.

In Brazil, Mexico and Uruguay a very similar methodology has been applied, which was received with great enthusiasm by both power companies and PCB holding entities. After the necessary conditions had been created at national level, PCB holders advanced independently with disposal activities. Afterwards, they indicated that they found it much easier to undertake such endeavors where necessary conditions were in place and standards had been clearly defined. The project in Colombia is comparative to these initiatives and its funding level is proportional to the level of operation considering local conditions.

Finally, project activities and results will be of interest to other countries in the region as they are likely to face similar issues related to the environmental sound management and disposal of PCBs, therefore GEF funding is expected to contribute to strengthen PCB management and disposal practices beyond Colombia.

The environmental benefits from this project are concrete and measureable. Directly, the demonstration project will properly dispose c tones of PCBs and the conditions established to manage and dispose of PCBs in an environmentally sound manner will indirectly facilitate the total elimination of PCBs in the country as per the Stockholm Convention established calendar.

B.3. DESCRIBE THE SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT AT THE NATIONAL AND LOCAL LEVELS, INCLUDING CONSIDERATION OF GENDER DIMENSIONS, AND HOW THESE WILL SUPPORT THE ACHIEVEMENT OF GLOBAL ENVIRONMENT BENEFITS(GEF TRUST FUND) OR ADAPTATION BENEFITS (LDCF/SCCF). AS A BACKGROUND INFORMATION, READ MAINSTREAMING GENDER AT THE GEF.":

Economic Benefits: As described in section B.2, instead of funding the extraction and disposal of PCBs (costly according to calculations undertaken as part of the PCB inventory) GEF funding will be applied as seed capital to enable stakeholders to subsequently proceed with the conversion and disposal of PCBs making use of financially viable PCB disposal technologies and conditions as put in place as part of the project. In order to lay the groundwork for Colombia's total PCB elimination, the project will partner with at least two interested technology providers to evaluate two alternatives for the decontamination and disposal of equipment contaminated with low concentration of PCB. These demonstrations will help determine the technical, economical and environmental requirements for the application of disposal technologies which fit the country's requirements.

Gender Dimensions: Efforts to ensure the Sound Management of Chemicals, including Persistent Organic Pollutants (POPs), have important gender dimensions. In daily life, men, women, and children are exposed to different kinds of chemicals in varying concentrations. Biological factors — notably size and physiological differences between women and men and between adults and children — influence susceptibility to health damage from exposure to toxic chemicals. Social factors, primarily gender-determined occupational roles, also have an impact on the level and frequency of exposure to toxic chemicals, the kinds of chemicals encountered, and the resulting impacts on human health.

Often, gender dimensions are considered to be 'women affairs', however UNDP considers "gender" to refers to the socially constructed rather than biologically determined roles of men and women (and children) as well as the relationships between them in a given society at a specific time and place.

With respect to the management and disposal of PCBs, it can safely be assumed that in Colombia the majority of PCB handlers such as workers employed by electricity generation and distribution companies, maintenance companies, junkyards and recycling plants, large consumers and industries, retail consumers and industrial users among others, are men. On the other hand, women and children, who spent most time within their communities, might be at greatest risk from close proximity to PCB contaminated areas. As part of the proposed project, the protocols for sampling and analysis in different human matrices (e.g. blood and breast milk), will contribute to determining which populations at at the greatest risks of expore to PCBs.

These gender dimensions will need to be reflected at both site- and policy-level interventions for the sound management of chemical and the sound management of PCBs in particular. Therefore, the PPG phase of the project anticipates to assess fully the gender aspects of the management of PCBs their disposal as well as the management of PCB contaminated sites.

B.4 INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND IF POSSIBLE, PROPOSE MEASURES THAT ADDRESS THESE RISKS TO BE FURTHER DEVELOPED DURING THE PROJECT DESIGN:

| Risk | | Risk mitigation measures |
|---|---|---|
| Low interest to participate in the project | М | The development of the PCB legislation will increase interest and buy- in. A steering committee with representatives of the different involved |
| by the owners of PCBs. | | directed towards the users and owners of PCBs. |
| Risk of contamination | М | The project will take the necessary security measures for PCBs handling, |
| for workers who handle | | follow any security protocols established on an international level |
| PCBs | | including the use of protective accessories and compliance with |
| | | procedures. The handling of PCBs will not be carried out within the |
| | | project (demonstrations) until the guidelines for safe handling are |
| | | completed and handed out. |

| Risk that the elements introduced to manage PCBs are inadequate | L | International guidelines will be consulted including regulations, standards and safety practices set out in various countries. Information will also be exchanged with other PCBs projects being implemented by the UNDP in the region |
|---|---|---|
| Risk of lack of control and monitoring. | L | The establishment of the information platform with systematic tracking carried out by trained inspectors will ensure that the necessary controls are carried out. |
| Overall Risk Rating | L | |

B.5. IDENTIFY KEY STAKEHOLDERS INVOLVED IN THE PROJECT INCLUDING THE PRIVATE SECTOR, CIVIL SOCIETY ORGANIZATIONS, LOCAL AND INDIGENOUS COMMUNITIES, AND THEIR RESPECTIVE ROLES, AS APPLICABLE:

A full assessement of all relevant stakeholders that are be involved in the project's development and implementation will be undertaken as part of the PPG phase. However at this stage the project proposal considers key stakeholders to be (list not exhaustive):

- Government Ministries such as the Ministry of the Environment, Housing and Territorial Development - MAVDT, Ministry of Mines and Energy – MINMINAS (including the Mining and Power Planning Unit - UPME), Ministry of Trade, Industry and Tourism - MINCOMERCIO, Ministry of Communications – MINCOMUNICACIONES as well as other ministries involved with aspects of POPs and chemicals management or whose activities have a significant impact on the sound management of chemicals (agriculture, natural resources, development planning and finance, women affairs, education, defense, etc.).
- **National institutions** such as the Colombian Institute of Hydrology, Meteorology and Environmental Studies IDEAM, the National Health Institute INS, national universities as well as vocational training institutions.
- Private sector: Entities involved in electricity- generation and its distribution and other PCB holders, stakeholders involved in the handling of PCBs (maintenance companies, junkyards and recycling plants, large consumers and industries, retail consumers and industrial users among others) as well as companies interested in investing in PCB disposal technologies and/or facilities.
- Industry associations: Such as the Colombian Association of Micro, Small and Medium Size Companies – ACOPI, the National Association of Industrialists – ANDI, and others to be identified.
- NGOs and CSOs: Representing the rights and voices of poor communities affected by inadequate PCB management and disposal, such as those communities living close to or are being affected by PCB contaminated sites, as well as NGOs advocating for environmental management and the danger of improper chemicals management.
- Workers unions/representative groups: Representing workers handling/amintaining PCB containing equipment (e.g. maintenance companies, junkyards and recycling plants), workers dealing with waste management and disposal (transporters, traders, scavengers, collectors, sellers) and government personel involved in the enforcement of health and POPs related regulations (police, customs control staff and other authorities).

B.6. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

The United National Development Programme (UNDP) has taken a large program management and disposal of PCBs within the Latin-American and Caribbean region. Similar projects to the proposed Colombia project, have been or are being implemented in Argentina, Brazil, Mexico and Uruguay and as

such will allow for exchange of experiences, lessons-learned and best approaches and practices to the implementation of project activities and financing opportunities. These projects are:

- Argentina: *Environmentally Sound Management and Disposal of PCBs in Argentina, GEF Grant:* US\$ 3,400,000
- Brazil: Establishment of PCB Waste Management and Disposal System, GEF Grant: US\$ 4,733,000
- Mexico: Environmentally Sound Management and Destruction of PCBs, GEF Grant: US\$ 4,630,000
- Uruguay: Development of the National Capacities for the Environmental Sound Management of *PCBs in Uruguay*, GEF Grant: US\$ 954,550

In addition, experiences from countries in other regions (Ghana, Kazakhstan, Kyrgyzstan, Latvia, Morocco and Slovak Republic) where UNDP also supports the sound management and disposal of PCBs will also be contributing to the implementation of the proposed Colombia project.

Regarding national activities related to the sound management of POPs, ODS as well as Chemicals and Ozone Depleting substances, the below list of initiatives are expected to provide useful information, lessons-learned or a good policy/regulatory foundation for the components to be carried out under the proposed project. Coordination with the executing agencies/entities will be ensured. As part of the PPG phase, a full description of on-going and planned activities that are beneficial/complementary to this project will be elaborated:

- IBRD Initial Assistance to Colombia to Meet its Obligations Under the Stockholm Convention on Persistent Organic Pollutants (POPs), GEF Grant: US\$ 500,000
- UNIDO Strengthening National Governance for SAICM Implementation in Colombia, SAICM QSP TF Grant: US\$249,800
- UNDP Support to the Government of Colombia in meeting its obligations under the Montreal Protocol (through e.g. Institutional Strengthening, HCFC Survey and Inventory, Chillers Demonstrations Project, ODS Waste Management, MDI Investment and Manufacturing, etc)

C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:

As confirmed in Annex L of the GEF document "*Comparative advantages of the GEF agencies*", UNDP has a comparative advantage in the area of Persistent Organic Pollutants, in specific with respect to Capacity Building and provision of Technical Assistance. The proposed project will benefit from UNDP's experience in integrated policy development, human resources development, institutional strengthening, and non-governmental and community participation.

The elements proposed as part of the present project are already being successfully implemented in a multitude of UNDP PCB projects world-wide. To date, GEF funding has been approved for UNDP-supported PCB management activities in the following 10 countries: Argentina, Brazil, Ghana, Kazakhstan, Kyrgyzstan, Latvia, Mexico, Morocco, Slovak Rep and Uruguay. UNDP supports these countries in strengthening legal frameworks and improving enforcement capacity pertaining to PCB management, undertaking additional PCB inventories to identify remaining geographically dispersed PCBs and sensitive sites, improving PCB management practices (such as handling, storage, transport and destruction), ensuring safe disposal of PCBs in collaboration with PCB-containing equipment holders, and implementing public awareness campaigns and communication strategies to support all of the above activities.

C.1 INDICATE THE CO-FINANCING AMOUNT THE GEF AGENCY IS BRINGING TO THE PROJECT:

The United Nations Development Programme (UNDP) has contributed with in-kind technical support and assistance for initial scoping meetings with Government counterparts and project stakeholders which took place in the preparation for the formulation of this PIF. Identification of further in-house cash contribution towards the initiative will be undertaken during the PPG stage of the project.

Considering the scope of the project, UNDP's in-house expert resources involved in energy sector programs at country, regional and headquarters level will be mobilized contribute towards project implementation. In addition to this, the Resident Representative functions and Country Office human resources and facilities will be available beyond strict cost recovery basis for the successful project implementation. The value of this can be expected to exceed US\$ 100,000 during the life of the project.

As additional UNDP's added value to the project, the UNDP's developed expertise in the management of PCBs includes knowledge on guidelines in the maintenance of transformers, laboratory methodologies to ensure reliability of results, storage of PCBs, available technologies for PCB disposal and providers, legal frameworks in a diverse set of countries, among others. This expertise will be provided as technical assistance in the project to help in the removal of barriers for the sound management and disposal of PCBs in Colombia.

As described in section C above, UNDP is also already supporting the implementation of sound management and disposal of PCBs in other countries in the region (Argentina, Brazil, Mexico and Uruguay) and worldwide (Ghana, Kazakhstan, Kyrgyzstan, Latvia, Morocco and Slovak Republic). UNDP will ensure that the project in Colombia benefits from the experiences and lessons learned from the implementation of these projects, in particular from the strengthening their legal frameworks and improving enforcement capacity pertaining PCB management, undertaking PCB inventories to identify remaining geographically dispersed PCBs and sensitive sites, improving PCB management practices (such as handling, storage, transport and destruction), ensuring disposal of PCBs in collaboration with PCB-containing equipment holders, and implementing public awareness campaigns and communication strategies to support all the above activities.

UNDP's experience in integrated policy development, human resources development, institutional strengthening and non-governmental and community participation will also benefit this project.

The environmental management experts in the Country Office have extensive experience in the implementation of GEF funded projects, such as those related to International Waters, Climate Change and Biodiversity as well as multi-focal areas projects. In addition, they have extensive experience in the development, implementation and monitoring of Montreal Protocol projects funded by the Multilateral Fund. Considering in-country presence and its long-standing experience in GEF and MLF project implementation, the UNDP Colombia environment unit is very well placed to follow up project implementation and progress.

C.2 HOW DOES THE PROJECT FIT INTO THE GEF AGENCY'S PROGRAM (REFLECTED IN DOCUMENTS SUCH AS UNDAF, CAS, ETC.) AND STAFF CAPACITY IN THE COUNTRY TO FOLLOW UP PROJECT IMPLEMENTATION:

The Colombia United National Development Assistance Framework - UNDAF (2008-2012), contains as one of the four outcomes the achievement of "Strengthened national, regional and local capacities

for the integrated regional development management of the territory in order to guarantee sustainable development" (UNDAF – Outcome 2).

The Country Programme Outputs pertaining to UNDAF Outcome 2 are listed below (outputs which will benefit directly from the proposed PCB management and disposal project have been highlighted):

2.1. National and regional capacity consolidated for the knowledge, conservation and sustainable use of biodiversity and for the preservation, management and recovery of the ecosystems in order to guarantee the maintenance of environmental assets and services. In particular:

 The National Environmental System [SINA, for its acronym in Spanish] is strengthened and modernized in order to better carry out its tasks and competencies (information systems, training, economic instruments, control of wild life, restoration of ecosystems, SINAP, etc).

2.2. Increased national capabilities to develop competitive and sustainable productive processes that take into account regional characteristics and comparative advantages. In particular:

 Mechanisms and instruments have been formulated and implemented to promote corporate social responsibility applied to sustainable development.

2.3. Improved national capacity for the implementation of programmes and policies on risk management and environmental deterioration mitigation. In particular:

- Improved national capabilities to implement a strategy for the elimination of pollutants.
- Improved national capabilities for the integral management of all types of wastes.

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

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the <u>Operational Focal Point endorsement letter(s)</u> with this template. For SGP, use this OFP endorsement letter).

| NAME | POSITION | MINISTRY | DATE (<i>MM/dd/yyyy</i>) |
|--------------------|---------------------------------------|---|-----------------------------------|
| Alicia Lozano Vila | Chief International Affairs Office | MINISTRY OF ENVIRONMENT HOUSING AND TERRITORIAL DEVELOPMENT | 11/17/2010 |
| | | | |
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B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation.

| Agency Coordinato r, Agency name | Signature | DATE (MM/dd/yyyy) | Project Contact Person | Telephone | Email Address |
|---|------------|----------------------|------------------------------|-------------------|-----------------------------|
| Yannick Glemarec | Y Glemauce | 11/18/2010 | Dr. Suely Carvalho | 1-212- 9066687 | suely.carvalho@undp .org |
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