



PROJECT IDENTIFICATION FORM (PIF)¹

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	Environmentally sound management and final disposal of PCBs		
Country(ies):	Republic of Serbia	GEF Project ID: ²	4877
GEF Agency(ies):	UNIDO (select) (select)	GEF Agency Project ID:	100313, XX/SRB/10/X01
Other Executing Partner(s):	Ministry of Environment, Mining and Spatial Planning	Submission Date:	Re-submission - 31 Jan 2013
GEF Focal Area (s):	Persistent Organic Pollutants	Project Duration (Months)	48
Name of parent program (if applicable): ➤ For SFM/REDD+ <input type="checkbox"/>		Agency Fee (\$):	199,500

A. FOCAL AREA STRATEGY FRAMEWORK³:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)
(select) CHEM-1	Outcome 1.4 POPs waste prevented, managed, and disposed of, and POPs contaminated sites managed in an environmentally sound manner.	Output 1.4.1 PCB management plans under development and implementation.	GEFTF	1,900,000	7,510,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others	Monitoring and Evaluation	GEFTF	100,000	200,000
Sub-Total				2,000,000	7,710,000
Project Management Cost ⁴			GEFTF	100,000	800,000
Total Project Cost				2,100,000	8,510,000

B. PROJECT FRAMEWORK

Project Objective: To protect human health and environment and to contribute to the overall capacity for development of sound management of chemicals by assisting Republic of Serbia, particularly in establishing the environmentally sound management (ESM) of PCBs, as well as in identification and prioritization of PCBs contaminated sites.						
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Cofinancing (\$)
1. PCBs wastes and contaminated equipment identification and pilot disposal	Inv	Enhancement of capacity at the national level so that identification and PCBs management are established.	1.1 Management capacity for identification and ESM of PCBs wastes and contaminated equipment used in non-power sectors enhanced;	GEFTF	1,700,000	6,850,000

¹ It is very important to consult the PIF preparation guidelines when completing this template.

² 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.

⁴ GEF will finance management cost that is solely linked to GEF financing of the project. PMC should be charged proportionately to focal areas based on focal area project grant amount.

			1.2 Knowledge and skills on risk analysis transferred; 1.3 Pilot quantities (200 tons) of PCBs disposed of;				
2. National assessment scheme and priority setting of PCBs contaminated sites	TA	Scientific mechanism and its capacities installed in the country to identify, inventory, assess possibly PCB contaminated sites so that the country will have a national strategy for addressing PCB contaminated sites.	2.1 Identification and inventory of PCB contaminated sites carried out; 2.2 Criteria set for priority setting; 2.3 Priority set for the identified PCB contaminated sites; 2.4 National strategy for PCB contaminated sites developed; 2.5 Risk assessment for pilot site performed.	GEFTF	200,000	660,000	
3. Monitoring and Evaluation	TA	Assessment of impact of project activities	3.1 Impact indicators designed and applied 3.2 Project implementation and impacts evaluated	GEFTF	100,000	200,000	
	(select)			(select)			
	(select)			(select)			
	(select)			(select)			
	(select)			(select)			
	(select)			(select)			
	(select)			(select)			
	(select)			(select)			
Sub-Total						2,000,000	7,710,000
Project Management Cost ⁵				(select)	100,000	800,000	
Total Project Costs						2,100,000	8,510,000

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

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	Government of Serbia	In-kind	500,000
Others	State owned company, EPS	In-kind	6,400,000
Others	State owned company, EPS	Grant	1,600,000
GEF Agency	UNIDO	Grant	10,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Cofinancing			8,510,000

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

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
(select)	(select)	(select)				0
(select)	(select)	(select)				0

⁵ Same as footnote #3.

(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
(select)	(select)(select)	(select)				0
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 Please indicate fees related to this project.

PART II: PROJECT JUSTIFICATION

A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

A.1.1 the [GEF focal area/LDCF/SCCF](#) strategies /[NPIF](#) Initiative:

1. The GEF Focal Area Strategy for 'Chemicals' in GEF-5 includes GEF assistance to countries to address chemicals in an integrated manner in their national planning, and help mobilize resources of finances for projects and programs for sound chemicals management to achieve global benefits. One specific objective has been defined which is relevant for this project: CHEM-1: Phase out Persistent Organic Pollutants (POPs) and reduce POPs releases; Outcome 1.4 POPs waste prevented, managed and disposed of, and POPs contaminated sites managed in an environmentally sound manner. This project will contribute to all of the above mentioned Expected Outcomes.

A.1.2. For projects funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:

N/A

A.1.3 For projects funded from NPIF, relevant eligibility criteria and priorities of the Fund:

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.:

2. The establishment of environmentally sound management (ESM) of PCBs is consistent with national priorities and strategies for elimination of releases to the environment and for elimination of hazards for human beings, as defined in the National Implementation Plan for the Stockholm Convention of the Republic of Serbia (NIP). The inventory, storage and final disposal of PCBs contaminated equipment and wastes are defined in the Action Plan for PCBs.

3. The main goal of Serbian Government's Action Plan for Contaminated Areas is a reduction of environmental pollution through remediation and recovery of identified POPs-contaminated sites.

4. This proposed project activities will provide an added value to the ongoing and projected activities implemented by the Government with assistance provided by partners and donors. Generating knowledge, skills and experiences on the actual application of ESM of PCBs in Republic of Serbia and management of PCB contaminated sites will enhance national capacities for meeting the country's obligations under the Stockholm Convention.

B. PROJECT OVERVIEW:

B.1. Describe the baseline project and the problem that it seeks to address:

5. PCBs-containing equipment and wastes are the major POPs management problem in the Republic of Serbia. According to the preliminary inventory of PCBs prepared in 2006-2007 the following can be concluded:

6. PCBs-based fluids have never been produced in the Republic of Serbia:

- Significant quantities of PCBs-based fluids have entered the country through devices and equipment imported during the period of intensive industrial development of Serbia (1960-1980);
- Equipment containing PCBs-based fluids has been produced in Serbia until 1986 at two site locations (transformers - ABS "Minel-Trafo" jsc in Mladenovac and condensers - ABS "Minel-Elektrooprema i postrojenja" jsc in Ripanj). Both companies are still present on the market producing the non PCBs equipment;
- The preliminary inventory of PCBs showed the presence of 767 transformers in use (total mass of 3,300 tons), 4394 condensers in use (total mass 172 tons) and 41 rotor resistors (total mass of 3 tons) but the realistic figures are expected to be much higher since significant discrepancies have been observed between data provided by local equipment manufacturers and data obtained during inventory compiling.
- The equipment out of use comprises: 27 transformers (total mass of transformers with fluid is 90 tons), 4003 capacitors (total mass of capacitors with fluid is 121 tons) and 50 tons of waste

including contaminated building material, barrels with oil contaminated with PCBs and other materials.

Baseline Activities

7. The legal base for appropriate PCBs management is given in the Law on Waste Management adopted in May 2009, as well as relevant by-laws which are drafted according to this law. The Law on Waste Management defined that equipment containing more than 5 dm³ of PCBs will be disposed of or decontaminated until 2015 at latest. The same applies for disposal of PCBs contained in the equipment. By the way of derogation, holders of equipment that contain between 0.05%-0.005% by weight of PCBs shall ensure its decontamination or disposal when such equipments cease to be used.
8. During the GEF funded project: “Enabling Activities for the Development of a National Plan for Implementation of the Stockholm Convention on POPs in Serbia”, the ministry responsible for environmental protection prepared:
 - Draft Rulebook on handling of PCBs-containing equipment and waste;
 - Guideline for identification, recording and safe handling of PCBs-containing equipment and PCBs waste, intended for the owners and the entities operating and maintaining PCBs equipment;
 - Procedure for verification of data obtained from the owners and entities operating or maintaining PCBs equipment.
9. Other related major baseline projects are the EU’s Instrument for Pre-accession Assistance (IPA) projects. Among many, there are two IPA projects that are well linked to environmental protection and transformer installation and maintenance. One is “ Construction of Substation 400/110 Kv Vranje-4 & Leskovac-2“ (CRIS Number: 2009/021-765), which plans to install high voltage transformers for the two substations in the southern part of Serbia under Elektromreza Srbije (Serbian Electricity Grid Company). The other one is “Environmental Protection at the Electric Power of Serbia (EPS) company” (CRIS Number: 2008/020-406), focused on meeting EU legal requirements (Directive 96/59/EC) regarding PCBs, provides EPS with assistance for the elimination of PCBs-filled devices until 2012. The project will cover: destruction and substitution of the PCBs-containing devices; decontamination and re-engagement of the PCB containing devices into service after PCB treatment; decontamination of contaminated surrounding facilities; decontamination of soil and water resources. The latter IPA project involves the Nicola Tesla Institute and Faculty of Technology and Metallurgy, Engineering Academy of Serbia, in the updating of PCB inventory and establishment of an ESM for PCB contaminated equipments possessed by EPS. EPS plans to identify a PCB final disposal option most likely in mid-2012. If EPS chooses to have a final disposal solution in the country, this project will dispose of identified PCB contaminated equipments owned by non-power sectors users using the final disposal process.

Contaminated Sites

10. There is no available data in Serbia that identifies the number of sites specifically polluted by POPs or PCBs. There are a large number of sites generally contaminated by different types of pollutants. The Serbian Environmental Protection Agency has identified 375 sites where long-term environmental pollution has been confirmed through soil and groundwater analyses.
11. The Regulation on establishment of criteria for determining the status of the endangered environment and recovery and remediation priorities (“Official Gazette of RS”, no. 22/10) was adopted in 2010. A classification system for determining the priorities for clean-up of contaminated sites is given in this Regulation and will provide assistance during establishment of priorities for the clean-up of the contaminated sites. In addition, the Regulation on the program for systematic monitoring of soil quality, indicators for degradation risk assessment and methodology for the development of remediation programs (“Official Gazette of RS”, no. 88/10) is adopted in November 2010. The Regulation prescribes the development of an inventory of contaminated locations and limit values in the environment. The inventory will be created on the basis of determined presence of pollutants exceeding the limit values allowed for concentrations in soil.
12. According to the document “The Kosovo Conflict, Consequences for the Environment & Human Settlements, UNEP, UNCHS, 1999” it was indicated the presence of high levels of soil pollution,

primarily by hydrocarbons, PCBs, heavy metals and other dangerous substances, near Pančevo, Kragujevac, Bor, Novi Sad, Barič, Kraljevo, Niš, Belgrade, Obrenovac, Prahovo and Priština, stressing out a necessity for soil remediation activities to be carried out. In year 2000, based on the mentioned report, EU and the UNEP have developed a detailed feasibility study, defining 27 land clean-up and soil remediation projects for sites that had been deemed the most polluted. Funds were provided for 22 projects under the UNEP clean-up program, and the implementation commenced at the end of 2000 and lasted until early 2004. The emission from such severe contaminated sites to the environment continues until addressed.

- B. 2. [incremental /Additional cost reasoning](#): describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated [global environmental benefits](#) (GEF Trust Fund/NPIF) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

PCB

13. In the GEF Alternative Scenario, 200 tons of PCB containing transformers and capacitors owned by non-power sector users such as transportation sectors and hospital would be replaced and disposed of. EPS also provides maintenance services for some of these equipment. The GEF project proposal will avoid overlapping efforts and further build on the capacities that will be developed for the IPA project such as field testing capacities for PCB inventories and institutional capacities for ESM. EPS will decide its final disposal option in mid-2012, and this project will build on the EPS capacities to ensure synergies between the IPA project and this one. The final disposal options for high and low PCB contaminated equipment could be different. In case that EPS chooses a decontamination process that is capable of treating only low PCB contaminated equipment, an option of exporting high PCB contaminated equipment outside the country for incineration could not be excluded to ensure that the pure PCB-containing equipment and wastes will be properly treated at a reasonable cost. If EPS would not choose to install an equipment, this project would establish PCB destruction capacity within the country. UNIDO has experience to install non-combustion PCB destruction technologies. However, in case of Serbia, there are also three existing cement kilns, and co-processing of PCB wastes in a cement kiln meeting BAT/BEP requirements would also be kept as an option for treating PCB-contaminated equipment in the country. The PCB inventory of electric equipment in non-power sectors would be updated in the proposed project. The technical strategies would be formulated based on the technical assessment carried out during the proposed project. Then, the technical option will be chosen through the international bidding following UNIDO's procurement rules and regulations. If the EPS will have an equipment to treat low PCB contaminated equipment, the capacities built through this project will serve the region as the company's regular business activities.

Contaminated Sites

14. For the component of PCB contaminated sites, possible PCB contaminated sites will be inventorized and assessed for priority setting covering the territory of the Republic of Serbia. A pilot site for future decontamination will be selected based on the risk assessment. The selection of decontamination technology options will be elaborated to seek future opportunities for cleanup. The proposed GEF project, therefore, will focus on demonstration site by engaging ex-situ or in-situ destruction technologies meeting the requirements of the Stockholm Convention by applying recently developed UNIDO Contaminated Site Investigation and Management Toolkit, where appropriate. Bilateral/multilateral assistance will be sought to implement the clean up plan developed by this project.
15. Without the GEF funding, there is a great possibility that much of the PCBs both from the PCB contaminated equipment and PCB contaminated sites are released in the environment or still unproperly managed, with subsequent environmental and human exposure.
- 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/NPIF) or adaptation benefits (LDCF/SCCF). As a background information, read [Mainstreaming Gender at the GEF.](#)":
16. Among the economic benefits of the proposed project are domestic institutional and technical capacities that could be built as a result of establishing ESM of PCBs as well as the process to

dismantle PCBs-contaminated equipment for final disposal meeting BAT/BEP requirements. Such institutional and technical capacities could be applied to improve waste management practices of other hazardous wastes such as waste oil and hazardous chemicals.

17. By taking advantage of the new UNIDO's project management system which now has gender-specific indicator boxes, the project will set gender-specific goals and carry out gender analysis to set the baseline and goal indicators. Women's group and organizations working on children's health will be invited to the Steering Committee as well as project events. The proposed project will pay attention to the gender dimensions specifically in promoting the ESM of PCBs to avoid negative impacts on the different social and gender groups. The indicators agreed during the project preparation phase will be used.
18. The local communities near the project site and the public in general will be invited to inception workshop to ensure they are well informed of the project status. It is believed that would consequently facilitate the environmental impact assessment processes which usually involve local communities residing in the proximity of the project site.
19. The global benefits of the proposed project are to avoid the leak of 200 tons of PCB into the air, water, and soil which would be consequently accumulated, otherwise, in human body and ecosystems such as mammals and birds in higher trophic levels and wildlife in Polar Regions. The capacities built for sound management of POPs could directly and indirectly contribute to reducing risks from toxic chemicals such as mercury through BAT applications to potential emission sources that are currently emitted from the country.

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	Level	Mitigation measures
The potentially increasing energy demand forecast due to the climate change and rapid power grid modernization/extension of the country could occupy the power sectors' priority agenda and environmental issues may not be considered as a high priority by the power sector.	L	The state owned power sector's senior management in charge of the environment has been informed and agreed to the project plan partly due to the country's obligations to meet EU's accession standards.
The government may not maintain their political will towards maintaining the capacities built to ensure sustainability and scaling up the implementation of measures that are proven to be effective.	L	The government has been and will be consulted in drafting this project proposal and during the implementation phase. Any official communication will be recorded.
PCB owners may not be committed to identify and treat PCB contaminated equipment.	M	The project will strengthen the transformer maintenance facilities owned by EPS and PCB contaminated equipment owners will benefit from the enhanced capacities of transformer maintenance facilities. Economic incentives will be considered as an option during the PPG phase.
Government (and communities) do not adapt sufficiently and fast enough to the new situation as envisaged during project implementation. This will lead to a delayed implementation and as such to a	M	The project proposal has been reviewed by the government and the state owned power sectors have agreed to the project concept. The project duration of 4 years is requested to mitigate delays of the project that could

delay in project completion		not be avoided. Relevant government ministries as stakeholders in the project should promote dialogue and facilitate appropriate changes in relevant policies.
Related GEF co-funded initiatives initiated by others (government and public sector etc.) do not start-up on time and as such the project cannot complement the (disposal) activities envisaged in this project. This will cause a delay in the strengthening of capacity building with regards to POPs stockpiles as well as it will cause a delay in the final disposal of safeguarded PCBs stocks as envisaged in this project.	M	The major stakeholders will be kept informed of the project development and implementaton status. Repackaging in UN approved packaging materials will allow temporarily storage of up to 5 years before disposal has to take place.

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:

Key stakeholders	Roles
National Government: Ministry of Environment and Spatial Planning and other relevant Government bodies	Facilitate and monitor project execution at the national level
UNIDO	GEF Implementing/Executing Agency
NGOs and CSOs: Local Agenda 21 for Kostolac – BOROUGH: (member of GEF-NGO) and others identified during the PPG phase	Contribute in advocacy, creation of awareness of communities and delivery of services at the grass root level
Private/public sectors: Electric Power of Serbia(EPS): the only state-owned power company which owns most of the PCB contaminated equipment Other stakeholders are Serbian Railways, RTB Bor, Institute Nikola Tesla, Faculty of Technology and Metallurgy	Participate in updating of PCB equipment inventory by identifying possibly contaminated PCB equipment, develop phase-out plans of in-service PCB equipment, properly store the phased-out equipment, support the establishment of ESM of PCBs

B.6. Outline the coordination with other related initiatives:

20. The Republic of Serbia has been involved in other UNIDO's efforts on chemicals management by participating on the UNIDO's BAT/BEP Regional Forum. The tasks of the Forum include but not limited to the timely completion of further work on regional promotion, application and diffusion of BAT/BEP in line with the guidelines and guidance document to assist the implementation of action plans, with emphasis on the chemicals (PCDD/PCDF, PCBs and HCB), industrial production processes and their source releases listed in Annex C of the Convention. Technical capacities built for this project could be utilized for the BAT/BEP activities and vice versa.
21. UNIDO also operates its Cleaner Production Center in Serbia which promotes improvement of environmental practices that are very often linked to cost efficiency. The capacities created through this project could be engaged to further improve environmental practice at transformer maintenance facilities of EPS including establishment of ESM of PCBs.

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

22. UNIDO is within the comparative advantage matrix set out in GEF/C.31/5 rev.1. UNIDO has been very active in implementing GEF projects under its POPs focal areas. In particular, UNIDO has accumulated extensive experiences in environmentally sound management of PCBs in the Eastern European and Balkan Region. UNIDO also developed its contaminated site approach which can be applied to this particular project.

C.1 Indicate the co-financing amount the GEF agency is bringing to the project:

23. The total amount of USD 10,000 in-cash in the pre-PIF Phase is offered as cash contribution of UNIDO for the proposed project.

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:

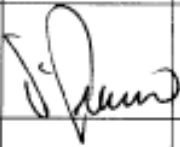

24. UNIDO currently supports capacity building and technical transfer in the area of (i)Energy & Environment, (ii)Trade, and (iii)Poverty Reduction. UNIDO has on-going projects in Serbia on Ozone Depletion Substances for which chemical management capacities have been well established. The UNIDO's headquarters where the project management will be carried out is located in the vicinity of Serbia. Therefore, this project matches the UNIDO's thematic program areas and the implementation will be well supported by its headquarters staff.

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 [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Aleksandar Vesic	Assistant Minister & GEF Operational Focal Point	MINISTRY OF ENVIRONMENT, MINING, AND SPATIAL PLANNING	

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Mr. Dmitri Piskounov, Managing Director PTC, UNIDO GEF Focal Point		March 16 2012	Mr. Fukuya IINO 	+43-1-26026 5218	f.iino@unido.org