

GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title:	Comprehensive Environmentally Sound Management of PCBs in Montenegro					
Country(ies):	Montenegro	GEF Project ID:1	9045			
GEF Agency(ies):	UNDP(select)(select)	GEF Agency Project ID:	5562			
Other Executing Partner(s):		Submission Date:	3 March 2015			
GEF Focal Area(s):	Chemicals and Wastes	Project Duration(Months)	48			
Integrated Approach Pilot	IAP-Cities IAP-Commodities IAP-Food	d Security 🗌 🛛 Corporate Pr	ogram: SGP 🗌			
Name of parent program:	[if applicable]	Agency Fee (\$)	332,500			

A.INDICATIVE FOCAL AREA STRATEGYFRAMEWORK AND OTHER PROGRAM STRATEGIES²

		(in \$)		
Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	GEF Project Financing	Co-financing	
(select)CW-2 Program 3(select)	GEFTF	3,500,000	17,9 <mark>79</mark> ,292	
(select)(select)	(select)			
(select)(select)(select)	(select)			
(select)(select)	(select)			
(select)(select)	(select)			
(select)(select)	(select)			
Total Project Cost		3,500,000	17,9 <mark>79</mark> ,292	

B. INDICATIVE **PROJECTDESCRIPTION SUMMARY**

					(in	n \$)
Project Component	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing	Co- financing
1. Capacity strengthening on PCB management	ΤΑ	1.1 Operators of the electric sector and of the environmental control authority trained on the ESM of PCBs	1.1.1 Training and development of guidance document for sampling of online and offline equipment, handling storage and disposal of PCB containing waste and equipment 1.1.2 Training and development of procedural and guidance documents for environmental	GEFTF	283,000	350,400

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the excerpts on <u>GEF 6 Results Frameworks for GETF, LDCF and SCCF</u>.

³ Financing type can be either investment or technical assistance.

	1	Г		r	,	
			Stockholm and Basel			
			convention, EU			
			regulation on POPs and PCBs, BAT and			
			BEP for PCB			
			treatment and disposal			
			operation.			
			1.1.3 Awareness			
			raising for the public			
			and the workers on			
			issues related to PCBs			
			and POPs, with			
			enhancement on			
			gender related issues			
			c			
		1.2 Enforcement of the	1.2.1 Gap analysis and			
		Montenegro law on	assistance in further			
		PCB managment	improvement of the			
		strengthened	country technical			
			regulations and			
			official guidance on			
			PCBs and POPs in			
			view of the alignment			
			with EU regulation.			
			1.2.2. Technical			
			assistance to the			
			environmental authorities on the			
			enforcement of the			
			law and regulation			
			related to PCBs			
2. PCB Inventory,	ТА	2.1 PCB inventory	2.1.1 Inventory	GEFTF	350,000	1,754,573
planning and		updated and completed	preparatory activity	02111	200,000	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
establishment of		with sampling and	and sampling plan;			
public-private		analysis of phased out	2.1.2 Conduction of			
parthership		and in-use equipment	the nationwide PCB			
		(3,000 samples)	sampling and analysis			
			plan (at least 3,000			
			samples)			
			2.1.3 Establishment of			
			a computerized			
			database for PCB			
			containing equipment			
		2.2 PCB national	2 2 1 Douolanmant			
			2.2.1 Development			
		management plan drafted and approved.	and approval of the national PCB			
		aranca ana approved.	management plan			
			2.2.2 Yearly upgrade			
			of National PCB			
			Management Plan (2			
			upgrades during			
			project			
			implementation).			
1	1	2.3 An innovative	2.3.1 Establishment of			
			1-1:- / · · ·			1
		public-private partnership for the	a public / private partnership for			

		management of PCB contaminated equipment and waste established.	conducting all the activities related to PCB ESM, 2.3.2 Sustainability plan for the public/private			
3. Environmentally Sound Management (ESM) of PCBs	ТА	3.1 Selected storage facilities upgraded for the safe storage of PCB equipment pending disposal or decontamination.	partnership drafted 3.1.1 Identification of storage facilities for the temporary storage of PCB contaminated equipment 3.1.2 Upgrade of safety and emergency response in selected storage facilities	GEFTF	2,550,000	15,524,319
		3.2 Environmentally sound technologies or services for PCBs disposal identified, assessed and procured	3.2.1 Identification and technico- economical feasibility analysis of disposal options based on the amount of pure and low-concentration PCBs identified. 3.2.2 Drafting of TORs for the procurement of PCBs disposal service and equipment. 3.2.3 EIA process over new decontamination technology carried out to enable technology to operate locally			
		3.3 Environmentally sound management of PCBs ensured with the disposal or decontamination of at least 700 t of PCBs contaminated equipment and 200 t of PCB contaminated soil	 3.3.1. PCB pure and contaminated equipment tested, inventoorized, disposed of or treated to decontaminate (PCB treatment/ disposal services contracted). 3.3.2 Destruction / treatment of 700 tons of PCB contaminated equipment and waste, including contaminated soil 3.3.3. Disposal / treatment of 200 t of PCB contaminated soil. 			

4. Monitoring,	TA	4.1. Project's results	4.1.1. M&E and	GEFTF	150,350	0
Learning, Adaptive		sustained and replicated	adaptive management			
Feedback and			applied to project in			
Evaluation			response to needs,			
			mid-term evaluation			
			findings with lessons			
			learned extracted.			
			4.1.2. Lessons learned			
			and best practices are			
			disseminated at			
			national level.			
			Subtotal		3,333,350	17,629,292
		Project M	anagement Cost (PMC) ⁴	GEFTF	166,650	3 <mark>50</mark> ,000
			Total Project Cost		3,500,000	17,9 <mark>79</mark> ,292
f Multi-TrustFund pro	ject :PMC in	this table should be the total a	and enter trust fund PMC b	oreakdowi	n here ()

C. INDICATIVE SOURCES OF **CO-FINANCING** FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co- financing	Name of Co-financier	Type of Co- financing	Amount (\$) ⁵
Private Sector	KAP (Kombinata Aluminium Podgorica)	In-kind	1,863,817
Private Sector	KAP (Kombinata Aluminium Podgorica)	Grants	7,011,148
Private Sector	Elektroprivreda Crne Gore a.d. (EPCG)	In-kind	541,752
Private Sector	Elektroprivreda Crne Gore a.d. (EPCG)	Grants	8,312,575
Recipient Government	Ministry of Sustainable Development and Tourism	In-kind	200,000
GEF Agency	UNDP	In-kind	<mark>30,000</mark>
GEF Agency	UNDP	Grant	20,000
Total Co-financing			17,9 <mark>79</mark> ,292

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE **PROGRAMMING OF FUNDS**^{a)}

						(in \$)	
GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNDP	GEFTF	Montenegro	Chemicals and Wastes	POPS	3,500,000	332,500	3,832,500
Total GE	Total GEF Resources					332,500	3,832,500

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

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

⁵ Euro to US\$ conversion was made using prevalent 0.8048 rate as of mid-December 2014

E. PROJECT PREPARATION GRANT (PPG)⁶

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

	Project Preparation Grant amount requested: \$100,000					Fee: 9,500	
GEF	Trust	Country/		Programming	(in \$)		
Agency	Fund	Regional/Global	Focal Area	Focal Area of Funds		Agency	Total
				of I unus	PPG (a)	Fee ⁷ (b)	c = a + b
UNDP	GEF TF	Montenegro	Chemicals and Waste	POPS	100,000	9,500	109,500
Total PP	G Amoun	t			100,000	9,500	109,500

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁸

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
 Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society 	Improved management of landscapes and seascapes covering 300 million hectares	hectares
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	hectares
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy,	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	Number of freshwater basins
legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	Percent of fisheries, by volume
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both directand indirect)	metric tons
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS,	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	900 metric tons
mercury and other chemicals of global	Reduction of 1000 tons of Mercury	metric tons
concern	Phase-out of 303.44 tons of ODP (HCFC)	ODP tons
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	Number of Countries:
mainstream into national and sub-national policy, planning financial and legal frameworks	Functional environmental information systems are established to support decision-making in at least 10 countries	Number of Countries:

PART II: PROJECT JUSTIFICATION

1. *Project Description*.Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4)

⁶PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$100k for PF up to \$3 mil; \$150k for PF up to \$6 mil; \$200k for PF up to \$10 mil; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

⁷ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

⁸Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during midterm and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

<u>incremental/additional cost reasoning</u> and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and <u>co-financing</u>; 5) <u>global environmental benefits</u> (GEFTF) and/or<u>adaptation benefits</u> (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

Baseline Scenario

1) Legislation on PCBs.

Handling of the equipment containing PCBs, transport of waste with PCBs, in Montenegro are regulated by the following legislation:

- Waste Management Law (OGM 64/11);
- The Law Ratifying the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous
- Chemicals and Pesticides in International Trade (OGM International Treaties 3/2011);
- The Law Ratifying the Stockholm Convention on Persistent Organic Pollutants (OGM International Treaties 16/2010);
- The Law Ratifying the Protocol on Persistent Organic Pollutants with the Convention on Long Range Trans-Boundary Air Pollution of 1979 (OGM - International Treaties 8/2011);
- The Law Ratifying the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (OGFRY International Treaties 2/99);
- The Law on Transport of Hazardous Matters (OGM 05/08);
- Decree on the Manner and Procedure of establishing the systems for takeover, collecting and processing of waste from electric and electronic products and work of such system (OGM 24/12);
- Rulebook on handling equipment and waste containing PCBs (OGM 48/12); On this specific aspect, the report on the alignment of Montenegro legislation with the EU regulation in the framework of the procedure for accession to EU states that " Montenegro achieved a high level of alignment with the PCB/PCT Directive 95/59/EC and started its implementation. The implementation will take time and will require investments and expertise. Particular efforts are needed for the safe disposal of the PCB containing equipment";
- Rulebook on handling waste oils (OGM 48/12);
- Rulebook on classification of waste and waste catalogue (OGM 35/12).

The main Law on Waste Management (OGM 64/11) defines the PCB principally as polychlorinated biphenyls (PCBs), polychlorinated terphenyls (PCTs), and others or any mixture of those listed in the regulation containing any of these materials in concentrations exceeding 0.005% of mass portion, including devices, buildings, materials and fluids containing, comprising or contaminated with PCBs.

In this regulation, PCBs are defined as a special type of waste, and any holders of PCB equipment and waste containing PCBs are legally obliged to ensure processing of waste and decontamination of PCB containing equipment. It stipulates that separating PCBs from the equipment, their processing and decontamination of evacuated equipment may be carried out by an organization which has the proper qualifications and equipment.

Further, this law prescribes that the National Waste Management Plan includes: the measures for separating PCBs and decontamination of equipment and PCB contained in it and timeframes for completion of decontamination or removal.

The classification of PCB containing waste follows the EU classification on hazardous waste:

- transformers and capacitors containing PCBs or PCTs are indicated under the key number: 16 02 09*, as well as 16 02 10*
- equipment stockpiled for disposal that contains or is contaminated with PCBs different from 16 02 09*,
- waste oil containing PCB is classified as 13.03.01*.

Montenegro has also specific and strict rules concerning the level of PCB contamination in recycled oil: Waste oils with PCB content greater than 50 mg in 1 kg of oil, can be refined only if after the regeneration the obtained oil contains maximum 5 mg PCBs and maximum 30 mg halogen in 1 mg of oil. Waste oils may be incinerated as fuel in the waste incinerators, only if they contain maximum 15% water in relation to the total mass of the mixture of oil and water, maximum 10 mg PCBs in 1 kg of oil, if their flash point is over 63°C and heat of combustion greater than 30 MJ/kg.

Until now, the following issues were found in the course of implementation and enforcement of the above listed regulations:

- Monitoring / inspections capabilities are limited;
- Information on cross-contaminated transformers (i.e. non pure PCBs) is scarce, as most of the information concern pure PCB equipment, therefore the extent of the PCB issue is not completely clear; indeed, CGES, the national electric company, started the activities for sampling, testing and labeling PCB equipment, which however is progressing very slowly;
- There are no disposal technologies for PCB in place. Although due to the size of the country it may still be more cost effective to send PCB waste abroad for disposal, an in-depth cost estimation on the matter has not been undertaken to allow documented and informed decision making;
- Some of the companies cannot afford the of replacement of old transformers contaminated by PCB which implies that such aging equipment will be still in operation for certain period of time before being disconnected.

2) Available data on PCBs inventory. Under the NIP, a preliminary inventory of PCB contaminated equipment was carried out in 2013 year. Data were obtained from the Administration for Inspection. The PCB inventory is not exhaustive, and for most of the equipment listed in the inventory traceability is not ensured. A large part of the equipment listed in the PCB inventory need still to be tested to ascertain whether the PCB content exceeds the Stockholm Convention limits.

In Table 1 below, a summary of the equipment possibly contaminated by PCBs and listed in the NIP is reported.

Site	Note	Transformer	Mass (t)	Capacitor	Mass (t)	Other equipment / waste	Mass (t)
AD Kombinat		51	205	167	15.069	Pyralen	12.1
aluminijuma						Contaminated sylicone oil	17
Podgorica OC		9	22	400	29.18	PCB contaminated soil	6.6
Elektroenergetika (KAP)						Barrels and containers contaminated with PCB	13.15
						Contaminated sawdust	0.2
						Sediment contaminated by PCB	2.5
Hemosan LLC Bar		Unkn.	2.16			Waste oil containing PCB (EWC 13.03.01*)	18
Elektroprivreda Crne Gore a.d.	At the site there is a large number of	199	Unkn.			18 disconnectors (switches)	
Nikšić (Power	equipment, in use,					(sances)	
Plant of	spare and deposited as						
Montenegro JSC	waste, that will be						
Nikšić)	subject to						
(equipment to be	inventorying and						
tested)	testing to the presence						
(EPCG)	of piralen in the coming period						
Željezara Nikšić	Some capacitors are			674	26.16		
(Steel Plant	labeled as "non PCBs"						
Nikšić)	the others need testing						
Complex of	Large quantity of old	6	Unkn.	26		Tank containing 100 litres	
former plant	capacitors and					of oil possibly	
"Radoje Dakić" in	transformers assumed to contain PCB					contaminated by PCB	
Podgorica	because of their mfg						
	date PCB capacitors			58	2.9		
Porto Montenegro	PCB transformers	2	Unkn.				
- Adriatic							
Marinas d.o.o.							
Željeznička	PCB concentration	4	110				
infrastruktura	less than 50 ppm						
Crne Gore a.d.							
(Railway Infrastructure of							
Montenegro JSC)							
Adriatic Shipyard		20	Unkn.	110	Unkn.		
"Bijela"							
Electro-industry	3 transformers	12	Unkn.				
"Obod" JSC	containing pyralene						
under bankruptcy	others to be tested	(2	T.L. 1	200	TT1	00.1	
Coal Mine Pljevlja		63	Unkn.	209	Unkn.	80 disconnectors	
Port of Bar	Equipment containing PCB	13	Unkn.	32	Unkn.		
Plantaže JSC "13. jul"		28				8 disconnectors	

Table 1: summary of data on PCB contaminated equipment and waste as from the NIP.

PCB contaminated material at KAP factory. Updated information (Table 2) concerning the amount of PCB waste was provided by KAP (Kombinata Alumina Podgorica). KAP is an integrated aluminium factory which underwent serious reduction of its activity, and now is in the final stage of handover to a new owner. The PCB contaminated material is stored in the factory or still in use. During the visit to the KAP factory, it was evident that the storage area

of PCB contaminated equipment may have been likely contaminated by PCB. KAP provided information on the PCB material stored or in use, to which an amount of around 200t of contaminated soil is added based on observation during the visit.

Table 2: Updated information	concerning PCB equipment	and waste stored or in use	at KAP facility
I			J

Type of PCB oil contained in online equipment	No. of equipment	Oil weight (t)	Equipment or waste weight (t) 106.2	
Online transformers	37	35.4		
Online capacitors	325	28.5	85.5	
Other equipment	2	4.8	14.4	
PCB oil (stored)	12.1		12.1	
Silicone oil contaminated by PCB	17		17	
Mineral oil contaminated by PCB	0.8		0.8	
Transformers contaminated by PCB (in use)	22		22	
Capacitors contaminated by PCB (in use)	29.89		29.89	
Barrels and containers contaminated by PCB	13.15		13.15	
Other PCB contaminated material	0.646		0.646	
Sludge	2.9		2.9	
Soil contaminated with PCBs (in barrels)	9.1		9.1	
Alumina contaminated by PCB oil	4		4	
Soil and infrastructures contaminated by PCB (estimation (in December 2014)	ated) based on site	visit observations	200	
Total amount of PCB contaminated equipment and P	517.686			

PCB contaminated equipment from EPCG. During a recent meeting with the national electric company EPCG, it was reported that the company is already undertaking a sampling and analysis activity of their equipment, however this is going very slowly due to lack of staff and, technical capacity and issues related to the difficulty to sample pole transformers in remote areas. The company expects around 10% out of an overall number of 6,000 transformers to be PCB contaminated equipment. Assuming an average weight for transformers of 0.6 tons, that may lead to an overall number of 600 PCB contaminated transformers, with an estimated weight of 360 tons, to which large power transformers contaminated by PCB need to be added. This figure needs to be confirmed by a proper sampling and analysis activity partially during PPG stage and later on during FSP implementation.

Considering the other amount of equipment to be tested in other sites like the Željezara Nikšić (Steel Plant Nikšić), the former plant "Radoje Dakić" in Podgorica, Porto Montenegro – Adriatic Marinas d.o.o., very likely the overall amount of PCBs contaminated equipment and waste in the country exceed 900 tons, of which more than 200 tons may be PCB contaminated soil.

As reported by other equipment industries, there is a high probability that other equipment not yet inventorized is found contaminated by PCB, and the soil at the sites were the PCB contaminated equipment has been operated or maintained is also found contaminated by PCBs.

Availability of disposal technologies in the country.

In Montenegro there are currently no technologies available for the safe disposal of PCB containing equipment. Previous activities related to the disposal of PCB contaminated material and waste (including contaminated soil) envisaged the packaging and transportation abroad of these waste, as following:

- In 2007, the Government of Montenegro through the company Miteko Belgrade exported from the Aluminium Plant Podgorica 65,600 kg of waste PCB transformers, 24 020 kg waste PCB capacitors, 36 080 kg of soil contaminated with PCB oil, 1260 kg of waste metal barrels and 81 200 kg of waste PCB oil. Waste transformers and capacitors were exported to Germany and they were prepared in the waste processing plant Envio Recycling GmbH & Co KG⁹ in Dortmund. Solid waste and oil contaminated with PCBs have been delivered to the waste processing plant Fernwarme GmbH in Vienna.
- In 2009, Brewery Nikšić "Trebjesa" JSC through company LLC Miteko Belgrade exported 1422.50 kg of PCB waste in Germany, were the waste where processed at the Envio Recycling plant in Dortmund¹⁰.
- Hazardous waste containing PCB from "Adriatic Marinas" was also exported for final disposal.

Baseline Project:

Current obligation for PCB phase out.

The Montenegro legislation on PCBs (Rulebook on handling equipment and waste containing PCBs (OGM 48/12)) establishes that PCB containing equipment has to be identified and phased-out by 2020. Further, it is worthwhile noting that Montenegro has implemented certain preparatory activities on aligning its national legislative framework to that of PCB/PCT Directive 96/59/EC (on polychlorinated biphenyls andpolychlorinated terphenyls) and the current versions of the Waste Management Law (OGM,64/11) and the Rulebook on Processing Equipment and Waste Containing PCB (OGM, 48/12) were updated with key regulatory pieces from the EU reference directives on PCB management.

The deadlines for the elimination of PCB / PCT are defined in the Waste Management Law (2020). Montenegro is a party to the Stockholm Convention since 2010 and the National Action Plan for the implementation of the Convention was adopted in 2013.

Holders of PCB/PCT-containing equipment and waste are obliged to keeprecords and submit reports to the EPA every year. They must also preparemanagement plans for the equipment and wastecontaining PCB/PCT with the measures for their removal or decontamination. The competentauthorities are in place. EPA is in charge of compiling reports delivered by the holders of PCB/PCT waste/equipment. The InspectionDirectorate will monitor the disposal, decontamination and storage facilities.

The Government of Montenegro identified the following main aspects lacking from enforcing proper implementation of PCB regulations:

- Comprehensive inventories of the existing PCB equipment as national so at the holders' sites;
- Data on storage and removal of the obsolete equipment and waste oils containing PCB by PCB equipment owners;
- Uniform instructions for identification, decontamination, use, transport, storage and disposal of PCB equipment or products.

⁹ This information was noted for record in a view of previous experience of the Government of Kazakhstan with state-funded early years PCBs export to same Envio Recylcing GmbH with violation of PCB equipment processing standards and contamination of its employees that resulted in legal proceedings against the company for compensation of damages caused.

¹⁰ See previous footnote

Identification of PCB contaminated equipment and waste

In the country some activities related to the testing and analysis of of PCBs already started but are progressing at a slow pace. The Administration for Inspection is in charge of checking the presence of PCBs contaminated equipment in industrial and electric power infrastructures, and to ensure that the equipment is identified, labeled and scheduled for disposal or treatment before 2020.

The national electric power company EPCG is in the stage of identification of PCB contaminated transformer and is currently drafting a strategy for PCB phase out in view of the 2020 deadline established by the country for the phasing out of PCBs, five (5) year earlier than the Stockholm Convention deadline, but according the Law on waste management. However, EPCG is lacking the technical capacity and the resources for conducting sampling and analysis of PCBs of small pole transformers locate in remote places.

Another main player - KAP facility - has currently on storage a significant amount of PCB equipment and waste, and is implementing a maintenance plan which also involve large transformers possibly contaminated by PCBs. KAP is in the process of drafting a PCB management plan, which was delayed due to the restructuration and selling of the company to a new owners which took place in the recent years. During the meeting with the new owner of the company, the government and UNDP the company declared its full commitment to solve the PCB legacy and to support the project.

Analytical determination of PCB in dielectric oil and in the soil

CETI (Center for Eco Toxicological Research of Montenegro) has the capacity to carry out PCB analysis in the environmental matrixes and in dielectric oils. It was established by the Government decision of 20. 12. 1996 (Official Gazette no. 40/96) and registered with the Commercial Court for the performance of activities of public interest such as for example, ecotoxicological testing of all segments of the environment: air, surface and ground water and sea water, waste water, drinking water, land; testing of ionizing radiation; specific toxicological and expert studies, analyzes and programs for the state and research institutions, and other organizations; measurement of the sources of pollution; risk assessments and waste categorization.

The CETI has ISO/IEC 17025 accreditation for examining POPs compounds in the samples from the environment (water, soil, sediment, air) and samples of fish, and it is a current participant in UNEP's Global Monitoring Network for the POPs compounds.

CETI has satisfying capacities and knowledge for OCP and PCB in the samples from environment, in food and biological samples collected from people. As part of the program "Toxic substance in soil monitoring program", CETI conducted sampling and analysis for the determination of PCBs in soil. Analytical determination of PCBs in dielectric oil and sludge conducted in 2014 on samples taken at the KAP facility proved a high PCN contamination of these matrixes.

Storage and disposal of PCBs in the country

On the territory of Montenegro there are private companies that collect and transport waste with PCBs. Such type of waste has been exported in the recent years for final disposal abroad. Based on estimates provided in the NIP, investment costs for foundation of the centre for collecting and depositing PCBs would amount to cca. 2 million euros.

The places where PCB waste and equipment are currently stored pending maintenance are: KAP, Hemosan LLC Bar, Željeznička infrastruktura Crne Gore a.d, EPCG, Complex of former plant "Radoje Dakić", Željezara Nikšić, Electro-industry "Obod" a.d. Cetinje, Port of Bar, Adriatic Shipyard "Bijela". There are only limited measures adopted at these sites to prevent spillage of further spreading of PCB in the environment, as demonstered by the very high level of contamination by PCB in the settling tank sludge at the KAP facility.

The Proposed Alternative Scenario

The proposed alternative scenario intends to support the country with the necessary technical and financial assistance to ensure that all the remaining PCBs in the country (estimated in not less than 900 t of PCB contaminated equipment and waste) are identified and disposed of.

The project will be implemented side by side with the relevant institutional and industrial stakeholders, i.e. the Ministry for Sustainable Development and Tourism, EPCG, KAP and other holders of PCB equipment which will be properly identified in the PPG stage.

Although the project expects to solve all the remaining PCBs issues in the country, it shall ensure that enough capacity for the sound management of PCB wouldhave been built for the management of any further PCBs identified after project's closure.

The project will consist of the following four (4) components which are explained in better detail in the following sections of the PIF:

Component 1. Capacity strengthening on PCB management; Component 2. PCB Inventory, planning and establishment of public-private parthership; Component 3.Environmentally Sound Management (ESM) of PCBs, and Component 4. Monitoring, Learning, Adaptive Feedback and Evaluation)

Component 1. Capacity strengthening on PCB management.

The project will deliver practical training on the issues related to all the stages of PCB management, including: sampling and analysis of PCBs; storage and maintenance of PCB contaminated equipment; disposal technologies from the technical and economical standview. This component consists of the the following main Outcomes:

1.1 Operators of the electric sector and of the environmental control authority trained on the ESM of PCBs

On the side of sampling and analysis, training and guidance documentswill include, among others: preparation for sampling for grid-connected equipment in electric and manufacturing industry; prevention of electric shock accidents; spill prevention measures to be adopted; safety measures for operation in elevated or hard-to-reach locations(i.e. transformer located on pole or with difficult access); procedure to be followed for re-connecting the equipment after sampling, etc; sample preservation and chain of custody. Training will be also provided for the use of portable analytical tools for determining PCBs (chorine specific electrodes), by complementing standard laboratory testing (ECD or GC/MS methods).

Guidance and training will be also provided for handling, storage and transportation in compliance with the Basel Convention and ADR rules and for the the selection of the Stockholm Convention compliant disposal technologies (dehalogenation, dismantling and disposal) taking into account cost/benefit analysis based on the residual life of the PCB contaminated equipment.

1.2 Enforcement of the Montenegro law on PCB managment strengthened

The relevant control autority will be provided with proper training and technical support on the specific, Stockholm and Basel convention and related EU regulation requirements concerning PCB equipment and waste, including waste classification, shipment and disposal requirements, conduction of tailored inspection in specific industrial installations, prevention of improper maintenance and handling operation, accident prevention at sites containing PCB equipment.

As the proper management of PCBs equipment starts with awareness raising, an awareness raising campaign specifically aimed at communicating the PCBs associated environment and health issues for the public at large, for workers and operators will be implemented.

Component 2. PCB Inventory, planning and establishment of public-private parthership.

In Montenegro the legislation established that all the PCB contaminated equipment has to be decontaminated or phased out before 2020. At the current pace, although initial achievements have been made in terms of PCB identification and disposal, it is likely that the country will not be able to achieve the currently set 2020 deadline under business-as-usual scenario with partial investments into the PCB equipment phase-out.

2.1 PCB inventory updated and completed with sampling and analysis of phased out and in-use equipment

With the alternative scenario envisaged by the project, the Government of Montenegro and the main stakeholders will be assisted in planning and conducting an inventory of PCB equipment wich will serve as main tool for the definition of the national strategy for PCB phase out. The inventory of PCB will consist in the following step:

- inventory of all potential PCB owners and drafting of a sampling plan
- gathering of all available information certifying the absence of PCB from equipment (manufacturing data, maintenance data including replacement of dielectric oil, previous analytical information)
- definition of a sampling plan with priorities for all the equipment for which "PCB free certificates" are not available
- conduction of the sampling and analysis plan

Based on the available information, it is estimated that the inventory will cover at least 3,000 pieces of equipment, of which a certain representative number of units will be covered during the PPG stage for confirming expected percentage of PCB contamination. It is expected that the inventory will be completed in the first 3 years of project implementation, whilst the prioritized sampling and analysis will be conducted in the first 12 months of project implementation to enable first rounds of PCB export for pure waste and decontamination locally if such option is feasible for cross-contaminated equipment.

2.2 PCB national management plan drafted and approved.

Considering the urgency of starting disposal operation, the PCB national management plan will be initially drafted soon after project implementation on the basis of priority and preliminary information gathered during PPG stage; the PCB national management plan will be subsequently revised and improved yearly until project closure. The PCB management plan will contain the following:

- The regulatory and institutional framework governing
- The preliminary results of the PCB inventory, arranged by equipment age and PCB concentration.
- Equipment age and PCB concentration in the equipment are the 2 main parameters governing the selection of the proper disposal / decontamination technology and the timing of PCB equipment phase out.
- Identification of further PCB inventory activities
- Time frame of equipment to be decontaminated or disposed, based on the outcome of the inventory, established following the criteria of risk priority, residual lifetime of the equipment, PCB concentration;
- Indication of specific maintenance and replacement plan by the main Power Companies to check how additional inventory, decontamination and phase-out activities can be integrated in their plans;
- Listing of PCB contaminated sites
- Identification of the most suitable disposal or decontamination technologies, and definition of technical, environmental and economic criteria for decontamination and disposal of PCB contaminated equipment and oil in compliance with the Stockholm Convention BAT and BEP and the country's technical legislation;

• Preliminary budget for the storage, decontamination and disposal activities required under the action plan, including revenues coming from the recycling of metal scraps (steel, aluminum, copper) after decontamination.

2.3 Establish an innovative public-private partnership for the management of PCB contaminated equipment and waste.

Most of the larger holders of PCB contaminated equipment are totally or partially owned by the government. For instance, the government owns the majority of the shares of EPCG, whilst another significant share is owned by international private investors. There is therefore the need to establish a public/private partnership operating in all the stage of PCB identification, storage and disposal, and which can remain sustainable and operational after project closure for carrying out remaing PCB-related activities or other activities on POPs and chemical safety.

The public private partnership is necessary to operate as an independent body providing services in the field of transport of hazardous waste, establishment of technologies, sampling of electric oil and contaminated soil, planning, designing, etc. in compliance with the somehow conflicting missions of both the stakeholders (Ministry of Sustainable Development and Tourism and PCB owners) and to be more prompt in procurement and coordination of project activities. The public private partnership could imply the setting up of a service company participated by the Government and representatives of the PCB owners, or it may take the form of a memorandun of understanding to be inforce for the whole duration of the project.

Component 3. Environmentally Sound Management (ESM) of PCBs

This component will be undertaken building on the experience and activities already carried out by the country, and further ensuring that the activities of PCB disposal will be carried out in compliance with BAT/BEP and at the best cost/effectiveness ration.

3.1 Selected storage facilities upgraded for the safe storage of PCB equipment pending disposal or decontamination.

Currently, a significant amount of PCBs is stored at storage facilities in industrial plant, like at the KAP aluminium factory or transformer substations at ECPG. The project will select one or more of storage facilities to be upgraded at the required environmental and safety standard. A limited number of site cleanup activities - for instance for the PCB storage facility located at the KAP plant - will be also conducted. These will include site assessments and remediation plans, monitoring plans before and after remediation, risk-reduction operations, clean-up design and clean-up implementation.

It is expected that the cleanup and upgrade of the KAP storage facility would involve the treatment or disposal of around 200 tons of contaminated soil. This soil will be treated in compliance with the Stockholm and Basel convention requirements, as well as with the EU POPs regulation, i.e. safely landfilled if the PCB contamination is less than 50 ppm or treated with soil clean-up or HTI disposal technological solutions, if the PCB contamination exceeds 50 ppm.

3.2 Environmentally sound technologies or services for PCBs disposal identified, assessed and procured.

At this stage is not possible to identify which technology will be the best choice for the disposal or decontamination. It is clear that in the country a significant amount of "pure" PCB transformers (filled with pyralene or similar PCB based dielectric oil) is still present. In addition to that, a significant amount of PCB contaminated equipment (PCB concentration from fifty to some thousands of ppm) may exist, as well as a significant amount of PCB contaminated soil and waste.

There are a number of technologies available to solve the PCB issue in the most cost effective way. The following has to be considered in the review process:

- for relatively new transformers with low PCB contamination (cross contaminated transformers), the most cost-effective technologies are those allowing the decontamination of transformers and dielectric oil, by chemically destroying PCBs contained therein (chemical dehalogenation). Dehalogenation technologies are a class of quite consolidated processes commercially available both as large, fixed facilities or relatively small mobile units that could be rented. This process allow for the recovery of clean mineral oil after the PCB contained in that oil is extracted and destroyed and the mineral oil reprocessed, with a net saving in the order of US\$ 2,000 to 3,000 per ton of oil recovered. Therefore this option is the most attractive for the electric industry who wants to preserve the capital asset of relatively new transformers, ensuring at the same time the destruction of PCBs.
- old transformers at the end of their operational life, can still be treated by means of dehalogenation if the PCB concentration is not high. The decontaminated carcasses can be sold as steel scrap and the oil recovered after decontamination, whilst other solid waste (impregnated wood and cardboard) need to be thermally processed
- transformers and equipment filled with pure PCB oil will need very likely to be dismantled at the qualified hazardous waste HTI plants or their partners, and the PCB oil destroyed by means of thermal processes (incineration or co-incineration). For this type of waste therefore the most suitable option is exporting of either transformers in whole piece or of the PCB oil and impregnated porous material contained therein.
- For PCB contaminated soil, it must be considered that both the Stockholm convention and the EU regulation allows the landfilling of PCB contaminated soil only if the PCB concentration is below 50 ppm. For higher concentration, the PCBs must be " destroyed or irreversibly transformed so that they do not exhibit the characteristics of persistent organic pollutants"

Based on the above consideration, and on the updated figures for the inventory, the proper PCB disposal options will be identified and the relevant term of references for procurement of services and equipment drafted.

3.3 Environmentally sound management of PCBs ensured with the disposal or decontamination of 700 t of PCBs contaminated equipment and waste and 200 t of contaminated soil.

Based on the technology assessment above, the PCB oil and equipment identified in the inventory stage will be processed by the most suitable technology. Around 200 t of contaminated soil, excavated from PCB storage facilities, will be either disposed in landfills or send abroad for disposal.

Incremental reasoning

In the table below, the incremental and catalytic contribution of the alternative scenario in comparison with the baseline project is summarized by project component.

Baseline project component	Incremental reasoning as from alternative scenario		
	(GEF project component)		
Aligning the country legislation and PCB	Component 1. Capacity strengthening on PCB		
situation to the SC and EU requirement.	management.		
Being under the procedure for the accession to the EU, the country is currently undertaking a number of activities on PCBs in compliance with the national and EU. However, the following difficulties are reported by the government in	The project will complement the baseline project with the following activities which will ensure a timely and more complete implementation of PCB legislation:		
implementing PCB regulation:	• Training and development of guidance document on PCBs management for		
 lack of inventories of the existing PCB equipment; 	 operators; Training and development of procedural 		
 unavailability of data on storage and removal of the obsolete equipment and waste oils 	and guidance documents on Stockholm and Basel convention, EU regulation on POPs		

containing PCB;	and PCBs, BAT and BEP for PCB
• lack of uniform instructions for identification,	treatment and disposal operation for
decontaminati on, use, transport, storage and	environmental authorities;
disposal of PCB equipment or product	• Awareness raising for the public at large
	and the workers on issues related to PCBs
Co-financing from the government of Montenegro:	and POPs, with enhancement on gender
	related issues
• US\$ 200,000 in-kind for legal support	• Gap analysis and assistance in further
	improvement of the country technical
Co-financing from private industries:	regulation
	 Technical assistance to the environmental
• KAP: €134,400 for staff participating in project	authorities on the enforcement of the law
activities and office space	and regulation related to PCBs
 EPCG: €147,600 for staff participating in 	and regulation related to r CD3
project activities and office space over 4 years.	GEF Grant: US\$283,000
PCB Inventory and environmental monitoring	Component 2. PCB Inventory, planning and
TCD Inventory and environmental monitoring	establishment of public-private parthership.
EPCG already started the inventory of PCBs by	establishment of public-private partnership.
carrying out a survey of available documentation on	The project will support industries and the
PCB content of transformers.	government with a range of activities related
T CD content of transformers.	inventory planning, sampling and analysis of PCBs,
Activities concerning the identification of PCB	drafting of a sound PCB managent plan based on
equipment containing or contaminated by PCB	priorities and inventory results.
started, in compliance with the country's regulation.	priorities and inventory results.
however the industrial sector (both on the side of	The activity of the project will ensure that technical
manufacturing industry and electric power	and financial resource, as well as personnel, are
company) has limited technical and financial	enough for completing sn exhaustive PCB
capacity to conduct it, and the government has	inventory countrywide within 3 years from project
limited resources for ensuring an effective	starting, whilst after one year for project
monitoring of the compliance with the legislation.	implementation all priority PCB equipment will
Therefore inventory of PCBs is proceeding at a very	have been identified and tested.
slow pace.	have been identified and tested.
slow pace.	The PCB management plan will be updated yearly
The baseline activities are currently being financed	in the course of project implementation, based on
as follows:	new inentory data, to ensure its implementability.
	new mentory data, to ensure its implementatinity.
• KAP: allocated resources for sampling and	GEF Grant: US\$350,000
analysis of transformer oil and	OLI OIAIII. 059330,000
environmental monitoring amounting to $\epsilon_{159,200}$ (each)	
€159,200 (cash) EPCC allocated budget for sampling and	
• EPCG allocated budget for sampling and	
analysis of dielectric oil, including cost	
related to the loss of electricity production;	
it also allocated budget for environmental	
monitoring over 5 years, for a total amount	
of $\notin 1,252,880$ (cash)	
Replacement and maintenance of old	Component 3. Environmentally Sound
transformers and cleanup of contaminated sites.	Management (ESM) of PCBs
KAD is playing a substantial financial success.	The project will opprove that witch here it and
KAP is placing a substantial financial amount in	The project will ensure that suitable and cost
replacing old PCB contaminated transformers with	effective technologies and disposal options,
new transformers, to ensure the continuation of	compliant with the Stockholm Convention's
industrial activities. KAP allocated also funds for	requirements, are used for the treatment and
the decontamination of trasformers, upgrading of	disposal of PCB contaminated equipment, therefore

transformer storage, preparation of transformers disposal, cleanup of PCB contaminated sites	allowing for a greater cost saving on treatment of PCB equipment, especially on the side of low-
disposal, cleanup of FCB containinated sites	contaminated PCB equipment.
The electric power industry (EPCG) allocated	containinatea i en equipitent.
budget for replacing old transformers with new	The project will provide financial support for the
transformers; for the maintenance of transformers	disposal of 900 tons of PCB waste, tentatively as
pending their disposal; for the decontamination of	following (to be further confirmed at PPG stage by
PCB contaminated transformers; for the upgrading	means of sampling and analysis of a significant
of storage facilities and for the cleanup of contaminated areas. In addition, it allocated budget	number of equipment):
for covering the cost of EPCG staff will participate	• PCB transformers and capacitors: 300 t
in project activities	 Transformers and capacitors contaminated
F	by PCBs: 400 t
Due to financial and technical constraints, a limited	• PCB contaminated soil and sludge: 200 t
amount of resources is allocated for PCB disposal,	C C
improvement of PCB storage, decontamination of	
PCB contaminated equipment. In addition, the lack	GEF grant: US\$2,550,000
of local knowledge concerning the full range of technologies which can be used for disposing or	
decontaminating PCB contaminated equipment	
hinder the possibility to manage these equipment in	
an equipronmentally sound and efficient way. A	
detailed PCB management plan has still to be	
developed and implemented by the industry an the	
government.	
Total co-financing from private industries is as	
follows:	
• KAP: €6,848,972 out of which €1,500,000	
in kind	
• EPCG: €5,725,480 out of which €436,000	
in kind	

2. *Stakeholders*. Will project design include the participation of relevant stakeholders from <u>civil society</u> and <u>indigenous people</u>? (yes \square /no \square) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation.

The most relevant stakeholders were already involved at project identification stage. Meetings with the Ministry of Sustainable Development and Tourism, and key PCB holders - EPCG (both on the side of electric generation and distribution) and KAP were held to gather information on the needs of these stakeholders and to clearly explain what would be the project's benefits and at the same time co-finance obligations from public and private sources. Additional stakeholders, representing the civil society, NGOs, trade unions, and other beneficiaries were contacted and will be fully involved since the starting of project preparation activities.

3. Gender Considerations. Are gender considerations taken into account? (yes \boxtimes /no \square). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

At this stage of project development there are no direct gender considerations identified beyond the overall issues related to the higher risks generally associated with POPs being distributed in the broader environment for women, specifically related to their bioaccumulation and transfer through breast milk. However, it is fully acknowledged that particular attention has to be given to the connections between gender concerns and chemicals. Namely, women, men and children differ in their physiological susceptibility to the effects of exposure to toxic chemicals. Furthermore,

women are particularly influenced by the adverse impact of the hazardous chemicals due to the structure of their reproductive systems.

POPs and particularly PCBs are particularly harmful due to their capacity to accumulate in body fats and in breast milk, therefore representing a significant risk for women and infants. Usually, risk-based environmental standards and risk-based corrective actions, following a precautionary approach, are designed taking into account the highest risk for the most sensitive and exposed population categories, therefore environmental and toxicological limits already take into account the specific issue of women and infants. Nevertheless, specific awareness raising initiatives will be adopted to further reduce the risk of exposure of women and infants given their specific sensitivity.

In addition to that, in the course of project design and implementation, UN policies on equal oppportunities will be considered with the purpose to ensure that the project supports women's capabilities and their enjoyment of rights, and women's equal and meaningful participation as actors, leaders and decision makers.

4. *Risks*.Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

Risk	Risk reduction measure
Delayed or incomplete PCB inventory due to the absence of coordination, technical and economical difficulties in carrying out sampling of dielectric oil	The project intents to address this risk by establishing a feasible iand cost-effective nventory plan integrated with the maintenance schedule of electric equipment.
Project resources are not sufficient to ensure the disposal or decontamination of all the PCB containing equipment .	The project allocated enough grant and co-financing resources to dispose and/or decontaminate 700 tons of PCBs containing equipment and 200 tons of PCB contaminated soil. This amount is a realistic threshold which - based on the available information - should cover all the PCB contaminated equipment and waste in the country. Based on the PCB inventory, the exact quantity of PCBs will be better estimated to verify that the allocated resources are adequate.
PCB contaminated equipment not secured for disposal until project start.	Commitment with the main PCB owners will be obtained at the PPG stage. At this stage, committment from both KAP and EPCG, which are the 2 largest PCB owners in the country, has been already achieved.
Chemical accidents or spillage of PCBs during sampling, transport, storage or disposal	Procedures and associated training for the safe handling and disposal of PCBs will be established since the very beginning of the project.
Exposure to PCB of workers involved in the management of PCB containing equipment.	Workers will receive practical training on the use of PPE since the very beginning of the project. Health checks for workers involved in PCB management operation will be ensured.
Lack of commitment of PCB owners hindering the prompt identification and inventory of PCB equipment	The project fully acknowledges the technical and financial impact of PCB management for manufacturing and electric power industries. An open discussion with the main industrial stakeholders (KAP and EPCG) already started at PIF stage, so that their commitments has preliminary secured and tentative co-financing identified. At this stage, the commitment from main industrial stakeholders is high.
Unproper or unsafe technology selected for the disposal of PCBs.	The project will built on the experience of many other GEF projects related at PCB management. There are already

	clear information and experience on the suitable technologies for any specific type of PCB containing equipment or waste. In addition, the fact that Montenegro already has in place and enforced a legislation on hazardous waste management inspired to the EU regulation and compliant with the SC and Basel convention will ensure that the requirements of these conventions will be fulfilled.
Difficulties in establishing a complete regulatory system within project timeframe.	Montenegro already has a foundational legislation on PCBs which is inspired by the EU directive on PCBs and which is compliant with the SC and Basel convention. The project intend to assist the country in drafting technical guidance documents, which will be teherefore approved with a procedure which is faster compared to the approval of a new or amended legislation.

5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives.

There are currently no other GEF projects related to POPs ongoing or in course of preparation in Montenegro. The project will however ensure coordination with UNDP and other UN agencies in case of preparation of new initiatives to be submitted to GEF for approval, to maximize synergy and avoid duplication of efforts. In addition, the project will strictly coordinate with initiatives and projects developed in relevant fields under the funds for accession to EU, to which Montenegro is a candidate country, like the project "Strengthening the environmental Protection System in Montenegro", which completion is expected by 2016.

6. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessements under relevant conventions? (yes $\square /no \square$). If yes, which ones and how: NAPAS, NAPS, ASGM NAPS, MIAS, NBSAPS, NCS, TNAS, NCSAS, NIPS, PRSPS, NPFE, BURS, etc.

The project is fully consistent with National strategies as follows.

1) PCBs are listed as the most urgent priority in the Montenegro National Implementation Plan of the Stockholm Convention. The following urgent action for solving the PCBs issue are identified in the NIP:

- Organize training in for the environmentally safe use and disposal of PCB containing equipment.
- Establish system for collecting data on use of PCBs in the industry
- Establish temporary storage for equipment and waste containing PCBs pending final disposal,
- Develop Plans for replacement of equipment containing PCBs in accordance with the Law on Waste Management Ensure financial support for resolving PCB elimination.

2) The project is in line with the national regulation on PCBs and waste, and indeed intents to provide a substantial technical and financial support to the Government of Montenegro for the more effective and timely enforcement of this regulation, which requires the phasing out and disposal of PCB containing equipment by 2020.

3) The project intends to address the obstacles reported by the country in aligning the country PCB regulation with the EU regulation on PCBs and POPs, namely:

- Lack of inventories of the existing PCB equipment;
- Unavailability of data on storage and removal of the obsolete equipment and waste oils containing PCB;
- Lack of uniform instructions for identification, decontamination, use, transport, storage and disposal of PCB equipment or products.
- Need of particular efforts for the safe disposal of the PCB containing equipment.

7.*Knowledge Management*.Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The work of the project will build on existing experience gained in similar programmes from the regional network so from other geographic areas covered by UNDP. UNDP has to-date been implementing such similar approaches in Latvia, Kazakhstan, Kyrgyzstan, Jordan, Morocco, Mexico, formulating new programmes in Turkey, Belarus and other partner countries for PCBs and a range of projects on POPs pesticides re-packaging and diposal. Information exchange between these is expected to happen via accumulated knowledge at UNDP Regional Hub (formerly in Bratislava, Slovakia, and now in Istanbul, Turkey), that provides technical oversight to ongoing UNDP-PCB initiatives and through engagement of qualified technical expertise that will be beneficial to the project in Montenegro.

The Stockholm Convention's mechanisms like the PCB Elimination Network (PEN) and participation in collective information events such as Webinars organized by the Basel Convention Secretariat provided will be utilized as knowledge management tools. On the national level, during project implementation, a web portal for sharing relevant project information will be designed and launched. Public access will be granted to all resources which are of public relevance such as project performance, guidances on PCB material management, environmental impact assessment documents etc. User-friendly summaries and multi-media materials of the project activities will be uploaded in the portal periodically. Further, project will plan for workshops and conferences will be held with the purpose to introduce previous experiiences on POPs and PCBs management from other countries.

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

A. RECORD OF ENDORSEMENT¹¹ OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

(Please attach the <u>Operational Focal Point endorsement letter</u>(s) with this template. For SGP, use this <u>SGP OFP</u> endorsement letter).

NAME	POSITION	MINISTRY	DATE (<i>MM/dd/yyyy</i>)
Ivana Vojinovic	General Director	MINISTRY OF Sustainable Development and Tourism	02/19/2015

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies¹² and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (<i>MM/dd/yyyy</i>)	Project Contact Person	Telephone	Email
Adriana Dinu, UNDP-GEF Executive Coordinator	Ainm	3 March 2015	Jacques Van Engel, Director, MPU-Chemicals	1-212- 906-5782	jacques.van.engel@undp.org

¹¹ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

¹² GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)

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