



Project Implementation Report

(1 July 2021 – 30 June 2022)

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| Project Title: | Introduction of an Environmentally Sound Management and Disposal System for PCB Wastes and PCB-contaminated Equipment |
| GEF ID: | 4446 |
| UNIDO ID: | 130249 |
| GEF Replenishment Cycle: | GEF-5 |
| Country(ies): | Indonesia |
| Region: | SA - Southeast Asia |
| GEF Focal Area: | Persistent Organic Pollutants (POPs) |
| Integrated Approach Pilot (IAP) Programs¹: | N/A |
| Stand-alone / Child Project: | N/A |
| Implementing Department/Division: | ENV / IPM |
| Co-Implementing Agency: | N/A |
| Executing Agency(ies): | Ministry of Environment and Forestry |
| Project Type: | Full-Sized Project (FSP) |
| Project Duration: | 60 months |
| Extension(s): | 4 |
| GEF Project Financing: | USD 6,000,000.00 |
| Agency Fee: | USD 600,000.00 |
| Co-financing Amount: | USD 26,372,130 |
| Date of CEO Endorsement/Approval: | 10/6/2010 |
| UNIDO Approval Date: | 7/26/2013 |
| Actual Implementation Start: | 10/10/2013 |
| Cumulative disbursement as of 30 June 2022: | USD 5,459,019 |
| Mid-term Review (MTR) Date: | 5/31/2017 |
| Original Project Completion Date: | 12/31/2018 |
| Project Completion Date as reported in FY21: | 3/31/2022 |
| Current SAP Completion Date: | 3/31/2023 |
| Expected Project Completion Date: | 3/31/2023 |

¹ Only for GEF-6 projects, if applicable

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| Expected Terminal Evaluation (TE) Date: | 6/30/2023 |
| Expected Financial Closure Date: | 12/31/2023 |
| UNIDO Project Manager²: | Carmela Centeno |

I. Brief description of project and status overview

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| Project Objective |
| This PCB Project has two main objectives, namely: a) To introduce and implement a PCBs management system to reduce and/or eliminate releases from PCB wastes stockpiles and PCBs containing equipment; and (b) To dispose of at least 3,000 tonnes of PCB wastes and PC-containing equipment in ESM. |

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| Baseline |
| <p>The Republic of Indonesia signed the Stockholm Convention on Persistent Organic Pollutants (POPs) on 23 May 2001 and ratified the multilateral environmental agreement on 11 June 2009. Among obligations mandated to parties are the development of the National Implementation Plan (NIP) for POPs and inventory and phasing-out PCBs toward banning the use of PCB-contaminated equipment until 2025 and complete disposal of PCBs wastes by 2028.</p> <p>The submission of the original NIP and the updated version in 2008 and 2015, respectively, were part of "Enabling Activities" funded by GEF and implemented by UNIDO. Both NIPs adopted National inventory of PCBs, banning the use of PCB-contaminated equipment until 2025 and complete disposal of PCBs wastes by 2028 as among Indonesia's Priority Action Plans. As stated in both NIPs, future projects/activities deemed necessary to support the Government of Indonesia (GoI) to implement the identified action plans and, hence, fulfill their obligation to the Stockholm Convention.</p> <p>This GEF-funded project, namely Introduction of an Environmentally-Sound Management (ESM) and Disposal System for PCBs Wastes and PCB-contaminated Equipment (a.k.a. The PCB Project) shall strengthen GoI's policy and technical capacity to carry out ESM of PCBs.</p> |

| Overall Ratings³ | FY22 | FY21 |
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| Global Environmental Objectives (GEOs) / Development Objectives (DOs) Rating | Moderately Satisfactory (MS) | Moderately Satisfactory (MS) |
| The project was rated MS for both FY 21 and FY22 as attainment of GEOs and DOs is severely impacted by the COVID-19 pandemic. While Indonesia has allowed entry of foreigners, some national restrictions have limited | | |

² Person responsible for report content

³ Please refer to the explanatory note at the end of the document and assure that the indicated ratings correspond to the narrative of the report

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| the delivery of certain services which delayed the installation and commissioning of the PCB disposal facility. It is expected that this would be accomplished soon with the further relaxing of COVID-19 restrictions. | | |
| Implementation Progress (IP) Rating | Moderately Satisfactory (MS) | Moderately Satisfactory (MS) |
| The project is rated MS on implementation for FY21 and FY 22 as COVID-19 pandemic persisted until the 1 st quarter of 2022. While measures have now been relaxed, it deeply impacted the delivery of some activities and services. | | |
| Overall Risk Rating | Moderate Risk (M) | Low Risk (L) |
| Moderate risk rating is given for this reporting period as administrative hurdles are being experienced. Coordination meetings will be continuously undertaken to mitigate this risk. | | |

II. Targeted results and progress to-date

Please describe the progress made in achieving the outputs against key performance indicator's targets in the project's **M&E Plan/Log-Frame at the time of CEO Endorsement/Approval**. Please expand the table as needed.

| Project Strategy | KPIs/Indicators | Baseline | Target level | Progress to-date |
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| Component 1 – Policy and Regulatory Framework | | | | |
| Outcome 1: Legislation and policies on PCB management, including incentive mechanism, adopted and endorsed to meet relevant obligation under the Convention | | | | |
| Output 1.1: Policy and Regulatory framework reviewed, formulated and adopted | A set of regulatory instruments compliant with Stockholm requirements on PCBs (Annex A, part II) adopted. | Currently, to implement the Convention, Indonesia has banned 10 POP chemicals through GR No. 74/2001. Except for the banning of PCB use, this legislation does however not contain specific provision on PCBs management and disposal. | Regulatory instruments, like a regulation framework on PCBs or an official guidance on PCBs Management is drafted, submitted to the relevant legislative bodies, and officially adopted. | <p>The main output under Output 1.1 and the Key Impact Indicator (KII) under this component have been successfully achieved (100%). A Ministerial Regulation (MR) No. P29/2020 specifically regulating PCBs Management has been formulated and adopted by the Government of Indonesia (GoI).</p> <p>During this reporting period, the mandatory dissemination of the formulated/adopted MR has been successfully carried out. A total of 12 dissemination events (hybrid) were organized targeting environmental supervisors at Provincial, District and Municipal levels. It also included five (5) MoEF's regional offices. A total of 1,183 participants from 400 Districts and Municipals in 34 provinces were engaged to disseminate the MR and also to improve their knowledge on PCBs management and the Stockholm Convention.</p> <p>A set of pre-test and post-test indicated a significant increase in participants understanding on policy and regulatory aspects of PCBs Management in Indonesia from 30% to 77%.</p> <p>The dissemination event was designed to make aware local governments (provincial, district and municipal) of their role and obligation to support the implementation of Stockholm Convention. It is expected a local initiative from local governments would expedite overall national efforts toward achieving the country's mandates under the convention.</p> <p>To lever a positive impact towards compliance, the PCB Project is also planning a dissemination of the MR to</p> |

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| | | | | <p>industries participating in the 1st and 2nd inventories. The dissemination will target 1,114 companies.</p> <p>While dissemination is mandatory, the project also design this as an EXIT STRATEGY, to ensure environmentally sound management (ESM) of PCBs sustained with improved roles of local governments and/or industries awareness.</p> |
| <p>Output 1.2: Economic and market-based incentives proposed for disposal of PCB-containing equipment and wastes.</p> | <p>An incentive mechanism for supporting the timely ESM disposal of PCBs equipment and waste agreed and implemented</p> | <p>No incentive mechanism for ESM management of PCBs in place</p> | <p>An incentive mechanism, based on sound market analysis and subject to a financial and sustainability assessment, is adopted in due time to support PCBs disposal within project timeframe.</p> | <p>Main output under this section has been considered achieved. A comprehensive research document on Economic Instrument and Incentive Mechanism has been well-developed through industries-targeted research and a focus group discussion.</p> <p>As advised by the National Project Director and the relevant units at MoEF, an official adoption of the drafted/proposed Economic Instrument and Incentive Mechanism was no longer a top priority delivery that must be achieved under the PCB Project (given existing policy and regulatory complexity under national hazardous wastes management regimes). The Economic Instrument and Incentive Mechanism was submitted by NPD to MoEF GEF Focal Point as a policy recommendation.</p> <p>To cope with the emerging dynamic, the PCB Project has been advised to develop and innovate alternative incentives that might facilitate industrial compliance towards roles and obligation on ESM of PCBs. Therefore, by the beginning of 2021, the PCB Project has been introducing a voluntary-based technical backstopping to industries to help them planning and/or implementing relevant stages of ESM at their companies. Among industries and industrial association benefited from technical backstopping are:</p> <ol style="list-style-type: none"> 1. PLN (state's electricity company) 2. PT. Suzuki Indomobil Motor 3. Pulp and Paper Association 4. PT. Krakatau Daya Listrik <p>The technical supports have resulted in increasing progress of PCBs inventory and development of management plan, pilot initiation on decontamination of PCB-contaminated transformer through retrofilling, and disposal of PCBs wastes. Within the remaining project duration, the PCB Project seeks to upscale pilot retrofilling with other potential companies/PCBs owners and continue technical backstopping as incentives to facilitate compliance towards ESM of PCBs.</p> <p>At national level, the absence of official incentive mechanism for PCBs management and disposal is to be coped with improving policy and law enforcement, to encourage PCBs owner performing PCBs inventory approaching the 2022's deadline. This strategy relies</p> |

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| | | | | on the provisions stipulated under MR P29/2020 that: "Owners of transformers, capacitors and dielectric oil hold responsible to carry out PCBs prior to 31 December 2021" and "Owners of PCBs wastes hold responsibility to carry out disposal prior to 31 December 2028". |
| Component 2 – Institutional Capacity Building and Development | | | | |
| Outcome 2: Strengthened institutional capacities on PCB management at central government level and at provincial level in selected provinces | | | | |
| Output 2.1: Capacity on PCB management built/strengthened among government staff in the central level | Capacity building needs for governmental institutions are assessed. Number of training addresses identified needs is designed and carried out successfully. | PCB inventory team was established during the PPG, this team can serve as initial PCB working group to be trained on ESM. | A PCB working group of at least 10 selected people will be trained on all technical, regulatory, financial, health and safety aspects of Environmentally Safe Management of PCBs enabling them to conduct training to other relevant stakeholders. | <p>Main output under this section has been achieved, that is a built/developed capacity on PCBs management for government staff at central and local levels.</p> <p>For central level, selected staffs at MoEF who were trained on concepts and practices (technical aspects) of ESM of PCBs have been able to provide training and coached for industries, particularly PLN (state's electricity company).</p> <p>Under this reporting period, the PCB Project is planning a "Basic Training on Environmentally Sound Management of PCBs" for environmental supervisors from Provincial, Districts and Municipal Environment Offices, whose roles are crucial to ensure implementation of PCBs management by the industries. Two sessions of training are expected to be organized for selected provinces in Java and Sumatera.</p> <p>Training for West Java, Jakarta, East Java and Banten (provinces of PCBs hotspots) will be carried on in Bandung West Java on 19 July 2022 (targeting 50 participants from more than 30 Districts and Municipalities). The other session is to be organized in August 2022 in Sumatera, targeting mainly Riau, North Sumatera, South Sumatera, Bangka Belitung and Riau Isles.</p> <p>Trainings for local environment supervisors aim at not only achieving mandatory delivery under this project's component. They also serve as an EXIT STRATEGY through which the targeted maximum 3,000-ton would be achieved during project implementation (toward 31 March 2023). Environmental supervisors at provincial and district/municipal levels are assigned with duties, responsibilities, authorities, and rights to carry out supervision and law enforcement in environment sector particularly in hazardous wastes management. Therefore, their contribution to the implementation of the Stockholm Convention and sound management and disposal of PCBs waste is crucial.</p> <p>The basic training covers administrative and technical aspects of regulations on PCBs management and most importantly critical aspect for identification and inventory of PCBs sources by Visual Test. This training target at least participation from 100 participants from both Java and Sumatera</p> |

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| | | | | <p>Islands (where more than 50 participants from 4 provinces and 30 districts/municipals already joined the first training in Java).</p> <p>Provincial and district/municipal governments are expected and encouraged to take over and continue the training for the remaining areas number to cover all Districts/Cities using their own funding sources.</p> |
| Output 2.2: Capacity built/strengthened, including laboratory capacity, to conduct extended inventory on PCBs in selected provinces covering at least Java island | <p>Number of staff trained to conduct proper inventory.</p> <p>Availability of a PCBs inventory covering at least all the provinces of Java Island, based on site survey, questionnaires and sampling.</p> <p>Availability of a PCBs management plan drafted and agreed by relevant stakeholders.</p> | <p>Limited number of staff are able to conduct inventory of PCBs.</p> <p>Data on PCBs contaminated equipment are not sufficient to establish a sound PCB management plan, which indeed has never been implemented. Efforts carried out in the course of the PPG in updating the inventory of PCB in Indonesia suggest that up to 40% of the transformers tested may have a PCB content higher than 50 ppm.</p> | <p>PCB inventory team established.</p> <p>At least one laboratory accredited to analyze PCBs.</p> <p>A PCBs inventory (including labelling and registration of identified PCBs equipment in the project database) carried out covering at least Java Island.</p> <p>A PCB management plan for the project, based on inventory outcome and priority considerations, which can be used as a model for the country PCB management plan, drafted and agreed among relevant stakeholders.</p> | <p>Under the previous reporting period, the PCB Project has reported very successful achievements:</p> <ol style="list-style-type: none"> 1. Three PCBs (instead of one mandatory lab) laboratories were established where one is fully accredited and launched to the public. 2. A comprehensive training on the operation of the facility/equipment were provided to each unit following establishment of the laboratories 3. Two phases of extended inventories were organized covering Java and Sumatera covering more than 4,500 transformers from more than 1,100 companies 4. PCBs Management plan was elaborated according to the results of inventories and was adopted by MoEF <p>Deliverables under this section contribute to the successful achievement (100%) of Key Impact Indicator number 2, that is "Amount of PCBs equipment, which have been already identified and registered in the project database, committed for disposal (at least 3,000 tons). One laboratory established under this section served 10% confirmation test using GC-ECD to Dextil tests under the 2nd inventory. While during the 1st inventory GC-ECD confirmation test must be carried out abroad, this is now no longer the case for Indonesia.</p> <p>Under this reporting period, the PCB Project performed activities to internalize knowledge and lesson learned from inventory activities to local governments, such as:</p> <ol style="list-style-type: none"> 1. Drawing solid patterns of PCBs contamination on transformers to facilitate data ownership at regional level district/city government. <p>Inventory data was analysed and grouped according to meaningful parameters such as year of manufacturing, level of PCBs, type of PCBs and geographical distribution by provinces. The latter parameter, when shared/informed to local governments has encouraged the request for training on ESM of PCBs. An online survey carried out to more than 1,000 local governments staff during MR dissemination concluded that more than 84% of the participants were eager to learn about Identification and Inventory of PCBs. This information will be referred as main information to design training for</p> |

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| | | | | <p>local governments (to be carried out under Output 2.1).</p> <p>2. Encourage development and adoption of PCBs Management Plan by wider stakeholders.</p> <p>As the owner of as many as 527,533 online transformers, PLN is encouraged to have a management plan to standardize and guide their national strategies and efforts towards PCBs identification/inventory 2022 and disposal 2028.</p> <p>A dedicated training on the development of PCBs Management Plan was organized in Mei 2022, inviting the PCB Project as main trainer. The training was considered successful, and a bigger training involving all units in Indonesia will be carried out in August 2022.</p> <p>The PCBs Management Plan should be the basis for PLN to carry out and sustain ESM of PCBs beyond project duration, and is expected as a model for other companies.</p> <p>3. Transfer/handover of ownership to encourage self-reliance and accessible PCBs laboratories to support national PCBs inventory</p> <p>Under agreed project's scheme, ownership of equipment procured for three PCBs laboratories established at PSIKLH - MoEF, PTL-BRIN, and PLN Pusertif is to be transferred from UNIDO to MoEF. Following this transfer, MoEF shall transfer each ownership to each entity/institution. The completion of this ownership transfer is expected to significantly increase the overall compliance for PCBs identification and inventory through the following scenarios:</p> <ul style="list-style-type: none"> - For PLN Pusertif, the laboratory shall have the independency and administrative justification to perform maintenance and procurement of chemicals to support self-inventory for PLN - For PSIKLH – MoEF and PTL – BRIN there is chance for both laboratories to provide PCBs identification services on a more commercial basis <p>The process of handover or transfer of ownership from UNIDO to MoEF will be performed in July 2022 and is expected to soon be accomplished.</p> |
| Component 3 – Pilot Environmentally-Sound Management of PCBs | | | | |
| Outcome 3: ESM of PCBs through proper collection, packaging, registration, labelling, transportation, storage and disposal of targeted PCBs wasted applied | | | | |
| Output 3.1: Operating entity (OE) selected | TOR for the selection of an operating entity (OE) fulfilling eligible criteria. | Currently PCBs are disposed of by owners without significant coordination. No operating entity in charge of ESM of PCBs is existing. | Institutional capacity of entities for PCBs handling and disposal assessed. One operating entity (OE) for | Main output or target under this section has been fully achieved, that is PT. Prasadha Pamunah Limbah Industri (PPLI) has been selected as the Operating Entity (OE) to operate the facility. The selection process was 100% initiated and organized by the MoEF/GoI. The selection process was |

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| | | | <p>handling and disposal selected.</p> <p>Technical and analytical capacity of the operating entity upgraded as needed.</p> | <p>designed in a way that selection process and result were valid and legitimate. Selection of the EO was not solely referring to technical, financial and infrastructural capability to handle and dispose PCBs. Most importantly, the selection fully refer to national administrative and regulatory requirements. As the result, PPLI as the OE is benefited from full support from government as MoEF's ownership to the result is very high.</p> <p>Ownership of the OE to the project is also very high. This is verified by OE's USD 2 million commitment for co-financing, implemented as PCBs Building, utilities and supporting infrastructure.</p> <p>Under this reporting period, the PCB Project and ELMA Servi Industriali as the manufacturer of the technology/facility are focusing on technical and analytical capacity of the OE to operate the facility. The Operating Entity (PPLI) has participated in three activities and trainings to improve their ability to understand the system and to handle and dispose PCBs, such as:</p> <ol style="list-style-type: none"> 1. Early stage of commissioning preparation with direct supervision from ELMA <p>During this "on the job training", ELMA upgraded knowledge and skills of OE on basic or initial stage on PCBs handling, such as:</p> <ol style="list-style-type: none"> a. Job Safety Analysis (JSA) and Emergency Response to exposure and spill/leakage, particularly specification of Personal Protective Equipment (PPE) required for PCBs handling; b. Procedure and technique for transformer draining; and c. Procedure and technique transformer dismantling <ol style="list-style-type: none"> 2. Online training by ELMA. <p>An online training was organized for a total of five (5) days covering the following topics:</p> <ol style="list-style-type: none"> a. Working, operational and safety principles of the Decontamination Module; b. Working, operational and safety principles of the Dehalogenation Module; c. Emergency procedures; <p>Pre and post tests were carried out to OE's selected technical staffs/operators. Their final scores varied among five participants, ranging from 45 – 88 (out of 100). As weakness of this online training was fully recognized by ELMA, UNIDO, MoEF and PPLI, it has been agreed to perform necessary improvement during the upcoming onsite training at PPLI's facility. The training is</p> |

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| | | | | <p>expected to be organized in parallel with commissioning which is forecasted to be initiated by the end of August or early September 2022.</p> <p>3. Introduction and Development of Business Model/Plan with OE</p> <p>To anticipate sustainability of the PCBs disposal facility, an OE is expected to have a business plan, which should be facilitated by the PCB Project. However, as the selected OE is an experienced wastes management company, the OE is expected to already have in their company portfolio and systems, a business model for PCBs management. Not to mentioned that the OE had before disposing pure PCBs from wastes capacitors.</p> <p>However, as national inventory reveals high/huge potential of PCBs only from online/operational transformers, the OE could only expect to receive PCBs wastes oil from a B-to-B scheme through refilling activity—which is not their main expertise/service. In this case, the PCB Project engaged PPL into a Pilot Refilling facilitated by the project in collaboration/cooperation with numbers of company to develop a complete value chain of a refilling service to treat PCB-contaminated online transformers.</p> <p>Involvement of the OE in this pilot is expected to leverage their capacity to understand and develop "product as service" business model, in collaboration with other value chains. Not only this is an EXIT STRATEGY for PPL's business sustainability, but also an effort to facilitate the creation of new business model (given the fact that refilling for PCB-contaminated transformers as a service was not existing before) that would contribute to creation of new job and economic opportunities within the whole cycle of ESM of PCBs.</p> |
| <p>Output 3.2: Pilot ESM system for PCBs established on the identified PCB owners sites</p> | <p>The overall procedure for PCBs equipment identification, labelling, tracking and transportation are established with proper technical code of practices and implemented.</p> | <p>Although Indonesia rules on the handling and disposal of hazardous wastes exist, these do not cover PCBs containing equipment.</p> | <p>Code of practices for packaging, transportation, labelling, tracking, temporary storage and disposal of PCBs drafted, translated in English and Indonesia, and approved.</p> <p>Operating entity properly equipped and licensed for carrying out packaging, transportation, labelling, tracking, temporary storage and disposal.</p> | <p>Two main targets under this section are development of Codes of Practices for ESM of PCBs and operational license is obtained by OE to perform packaging, transportation, labelling, tracking, temporary storage and disposal.</p> <p>Development of Codes of Practices for ESM of PCBs has been accomplished. The document has been submitted and received by MoEF. Important and critical aspects in the codes of practices have been adopted by MR P29/2020 on PCBs Management. This has been achieved within the previous reporting period.</p> <p>Within this reporting period, several progresses were made for licensing whereas the OE has established important communication and coordination with relevant unit under</p> |

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| | | | | <p>MoEF and the local government of Bogor District, such as:</p> <ul style="list-style-type: none"> - From the latter unit, OE has obtained license to perform PCBs wastes storage in their facility. The storage license could be extended shall PCBs wastes stored remain unprocessed until PCBs disposal facility is ready for operation - Transportation license is already obtained by the OE. This license is part of their transport license for hazardous wastes which includes PCBs wastes - For disposal, the OE is advised by MoEF to first accomplish commissioning stage. However, to support the commissioning, OE has been granted by MoEF a temporary license to dispose to a maximum of 30 Tonnes of PCBs contaminated oil and equipment using non-thermal technology installed by the project <p>As the results of this good progress, PPLI is now store 46 tonnes PCBs, consist of both oil and carcasses. The low-level PCBsoil shall serve as basis oil to get higher level PCBsmixture for commissioning at concentration ranges from 500 – 5000 PPM. A sufficient amount of pure PCBs (40%) is to be obtained from PT. Goodyear Indonesia.</p> <p>The progress under this section contributed to Key Impact Indicator 2 “Disposal facility established, tested and permitted for an overall disposal capacity suitable to cover or exceed project needs compliant with the requirement of Stockholm Convention” which now within this reporting period is calculated at 71%.</p> |
| Output 3.3: PCB treatment facility established or functional | <p>Suitable disposal technology for the ESM disposal of PCBs equipment/waste tested and permitted, for an overall disposal capacity suitable to satisfy or exceed project needs.</p> <p>Amount of PCBs equipment and waste successfully disposed.</p> | <p>There is not enough disposal capacity in the country to satisfy the need of PCBs disposal in compliance with the SC BAT/BEP criteria and deadline. There is currently not enough disposal capacity for disposing of the 3,000 tons of PCBs equipment committed for disposal under the project.</p> | <p>One or more suitable disposal facilities, compliant with SC BAT/BEP criteria, for a capacity suitable to fulfil or exceed project needs, established, tested and permitted.</p> <p>3,000 tons of PCBs equipment or waste disposed of by means of such facility.</p> | <p>Full installation of PCBs disposal facility and pre-commissioning are two major achievements within this reporting period. Several necessary adjustments to the facility, particularly to dehalogenation module were taken to anticipate the upcoming commissioning during this reporting period.</p> <p>The following are detailed progress and achievements made under this section, such as:</p> <ol style="list-style-type: none"> 1. Final completion and inspection of the installation: decontamination module, dehalogenation module and regeneration module <p>Final checking was carried out in March 2022, including blank test for both decontamination and dehalogenation modules. No leak detected during the test, and inspection was carried out by UNIDO and PPLI (to represented ELMA) to ensure all parts have been installed correctly as technical designed by the designated vendor (i.e. HEXSTAR</p> |

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| | | | | <p>Mitai). The inspection concludes a 100% condition.</p> <p>2. Corrective adjustment to dehalogenation module</p> <p>Several adjustments are considered as necessary and urgent by PPLI, which mainly aims at improving safety aspects on working with PCB-contaminated oil.</p> <p>Containment wall is going to be built around PCB-contaminated oil tank and also realignment of piping. The requested adjustments are only implemented following a written approval from ELMA. It is fully supported by project's budget and is expected to be accomplished by mid of August 2022.</p> <p>3. Delivery of Solvent and Sodium Metal to PPLI.</p> <p>Despite the challenge faced by ELMA early of this year, the sodium metal has finally arrived and has been safely stored in PPLI's storage facility. Prior to this delivery, solvent (<i>perchloroethylene</i>) for decontamination has been delivered and stored in the facility.</p> <p>4. Availability of PCB-contaminated Oil as feedstock for commissioning.</p> <p>The provisions of PCB-contaminated oil as feedstock for commission have been anticipated earlier even during pre-installation of the facility. PPLI as the OE is responsible to provide the feedstock.</p> <p>During this reporting period, the PCB Project (UNIDO and MoEF) took the initiative to support the provision. Referring to the results of PCBs inventory and anticipating quantity and quality of the feedstock, UNIDO proposed PCBs stockpiles at PT. Goodyear Indonesia (GY) at an amount of 100 liter. Facilitated by MoEF, several meetings have been organized between PT. GY, MoEF, PPLI and UNIDO.</p> <p>All the four parties have come into an understanding that provision of 100 litre pure PCBs is critical to support a successful commissioning of the PCBs facility, particularly the dehalogenation module.</p> <p>Technical and administrative preparations are taken by each party (MoEF, PPLI and PT. GY). At the moment, all parties are settling technical and administrative procedures following a kick-off meeting facilitated by PT. GY in their premise.</p> <p>The kick-off meeting however reveals one administrative challenge to transport the 100 litre PCBs oil from PT. GY to PPLI (i.e. waste transport manifests/record). This challenge is</p> |

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| | | | | <p>now still being discussed for solution, particularly between PT. GY, PPLI and MoEF).</p> <p>5. Preparation to collect and process at least 3,000 tons of PCBs contaminated materials.</p> <p>This activity is very critical to achieve one of main objectives of the project, that is to dispose at least 3,000 tonnes maximizing public-private partnership (ppp). This correlates directly with efforts to achieve Key Impact Indicator 4 "Amount of PCBs equipment treated".</p> <p>To achieve this objective, the project relies not only on strategies and activities developed and taken under this section, but also taking advantage from strategies and activities from other sections. For example, dissemination of regulation and training for local governments and industries, including technical backstopping provided to reputable companies are expected to contribute significant impacts on addressing this section.</p> <p>Through technical backstopping to, for example, PT. Suzuki Indomobil Motor a total of 11 tonnes PCBs have been sent to PPLI for disposal. PT. PLN, the largest PCBs owners is now developing PCBs Management Plan toward disposal in 2028.</p> <p>During the reporting period, the project strives to introduce beneficial feature of circular economic of non-thermal facility to PCBs owners, to attract their compliance. A total of USD 20,000 subsidies are to be provided to PCBs owners (through a contract for PPLI) to attract at least 30 tonnes PCBs wastes. Through this scheme, PT. Goodyear Indonesia is already arranged a contract with PPLI to dispose at least 20 tonnes PCBs wastes. Disposal at PT. GY is very critical as the company owned/stored pure PCBs (Pyranol) transformers and capacitors.</p> <p>6. Pilot Retrofilling</p> <p>While this activity is striving to contribute to develop business model, it is also expected to contribute to disposal of PCB-contaminated oil discharged from the process.</p> <p>One company was participating in the activity (PT. Krakatau Daya Listrik). While the pilot was terminated since the target transformer was not technically appropriate, a SOP has been developed and will be applied for new pilot targeting new prospective companies.</p> |
| Component 4 – Public awareness raising and advocacy campaigns | | | | |
| Outcome 4: Increased public awareness on issues concerning PCBs | | | | |

| Project Strategy | KPIs/Indicators | Baseline | Target level | Progress to-date |
|---|---|--|---|--|
| Output 4.1: Stakeholders engagement including NGOs and civil society established | Number of stakeholders targeted and participating in raising awareness initiatives. | Identification of target stakeholders for raising awareness on PCBs issues never carried out. | At least 2 universities, one NGO, 2 public institutions, 2 waste management companies identified and participated in raising awareness initiatives. | <p>Main target under this section has been fully achieved within the previous reporting periods. However, engagement with relevant stakeholders is consistently created through sessions of trainings and dissemination. Under section Output 1.1, dissemination of MR P29/2020 for local governments should also be considered as awareness raising.</p> <p>In July, the PCB Project will organize a talkshow inviting PT. PLN and PT. Freeport Indonesia as “champion” role model for planning and implementing ESM of PCBs in Indonesia. While talk show aims at disseminating regulation and best practices, it shall also contribute to awareness raising and advocacy campaign. In July 2022, two major events to be carried out are:</p> <ol style="list-style-type: none"> 1. Talkshow targeting all companies participated in the 1st and 2nd inventories as much as 1,114 companies; 2. Training on basic ESM of PCBs for local governments, targeting 100 environment supervisors representing Java and Sumatera islands. |
| Output 4.2: Development and implementation of training and awareness raising programs | <p>Awareness raising material.</p> <p>Number of awareness raising events held.</p> <p>Outcome of questionnaire surveys.</p> | No awareness raising material on PCBs is available in the country, either for the general public or for specific stakeholders. | Awareness raising materials specifically developed for universities, operators of PCBs owners (i.e. utilities large factories), public institutions and NGOs. | <p>Similar to section Output 4.1, main target under this section has been fully achieved within the previous reporting periods. However, development of materials for awareness raising has been part of knowledge management following organization of trainings and events.</p> <p>Materials developed (videos and clips) are developed and uploaded on the project's YouTube channel (@PCB Free Indonesia). Several major events contributing to knowledge management during this reporting period are videos developed as part of results from dissemination of MR P29/2020. In July, numbers of events and activities should contribute to the development of awareness raising materials and particularly to encourage compliance towards ESM of PCBs, such as:</p> <ol style="list-style-type: none"> 1. Training on Basic of ESM of PCBs, focusing on regulatory and technical aspects for environmental supervisors at local governments; 2. Dissemination of PCBs management regulations and best practices to industries participating in PCBs inventories; 3. Handover of GC Laboratories; 4. Pilot retrofitting; and 5. Launching of PCBs disposal facility. |
| Component 5 – Monitoring and Evaluation | | | | |
| Outcome 5: Effective project monitoring and evaluation implemented | | | | |

| Project Strategy | KPIs/Indicators | Baseline | Target level | Progress to-date |
|--|---|----------|---|---|
| Output 5.1: M&E mechanism designed and implemented | Types of monitoring and evaluation mechanisms and activities established. | | <p>Inception Meeting is established at the initial stage of project implementation.</p> <p>Project Steering Committee (PSC) is established and PSC Meeting is organized annually.</p> <p>Annual Work Plan and Project Implementation Reviews (PIR) prepared and submitted annually.</p> <p>Mid-term external evaluation is carried out.</p> <p>Final external evaluation is carried out. Terminal Report is completed.</p> <p>Project Management Information System is established.</p> | <p>Several main objectives and targets under this section have been achieved within previous reporting period such as:</p> <ol style="list-style-type: none"> 1. Kick-Off Meeting in 2013 2. Project Steering Committee (PSC) Meeting annually organized since 2014 3. Mid-Term Review in 2017 4. Development and maintenance of Project Information System 5. Project Implementation Review (PIR) is developed and submitted annually since 2014 <p>Project Management Unit (PMU) has been established since 2013 to carry out day-to-day project implementation and monitoring. Starting 2019, PMU has developed and introduced a more elaborated dashboard for monitoring at various levels: activity, output and impact indicator. The elaborated dashboard shall significantly contribute to the final evaluation and terminal report.</p> <p>Three main targets to be achieved within the next reporting period are:</p> <ol style="list-style-type: none"> 1. Final external evaluation; 2. Consolidation of Final Terminal Report; and 3. Organization of closing workshop. |

III. Project Risk Management

1. Please indicate the overall project-level risks and the related risk management measures: (i) as identified in the CEO Endorsement document, and (ii) progress to-date. Please expand the table as needed.

| | (i) Risks | (i) Risk level | (i) Mitigation measures | (ii) Progress to-date | New defined risk ⁴ |
|---|--|-----------------|--|---|-------------------------------|
| 1 | Delays in the adoption of guidance document and other regulatory tools on PCB management | Low Risk (L) | Adoption of official guidance as an alternative to the development of a full regulation, will ensure a faster approval. The institutional capacity building component of the project will provide training to the government and other stakeholders and may reduce the risk. | This risk is no longer relevant to the project, following the issuance and adoption of by the lex specialist regulation MR P29/2020 on PCBs Management by the end of December 2020. Risk level remains Low. | <input type="checkbox"/> |
| 2 | Lack of driving force for PCB owners and industrial stakeholders to participate and have their PCB wastes disposed | Modest Risk (M) | The development and adoption of an incentive mechanism, will catalyse commitment of PCB owners to provide reports of their PCBs and PCBs contaminated equipment and to dispose of these in an environmentally safe manner. | The issuance of MR P29/2020 is expected to lever and/or encourage industries compliance towards ESM of PCBs. Following its issuance by the end of December 2020, the project could not record and/or identify/observe an increased identification and inventory of PCBs among industries— | <input type="checkbox"/> |

⁴ New risk added in reporting period. Check only if applicable.

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| | | | | <p>despite the deadline of PCBs identification and inventory is set on 31 December 2022 (less than six months).</p> <p>With the absence of incentive mechanisms from government for PCBs disposal (and hazardous wastes management in general) and the absence of strict punishment from government to those not accomplishing PCBs identification before the set deadline, the risk should be considered as moderate/modest.</p> <p>To cope with this risk level, the PCB Project has introduced Technical Backstopping since the middle of 2020, targeting potential industries (those who own significant amount of transformers, dedicated budget for environmental management and incentive for compliance—environmental certification). The provisions of technical backstopping have effectively encouraged the followings:</p> <ol style="list-style-type: none"> 1. Disposal of PCBs waste 2. Improved rate of PCBs identification and inventory 3. Development of PCBs Management Plan 4. Compliance towards ESM of PCBs in general <p>While beneficiaries of this dedicated technical support are considerably low, the involvement of PLN (as the largest owner of transformers and capacitors in the country) could be expected to significantly contribute to the overall achievement/performance toward ESM of PCBs. This approach should be better managed to outreach more potential industries—those who are willing to comply with EMS of PCBs but are facing ranges of challenges toward it (from financial to technical issues).</p> <p>Another strategic measure to cope with this risk is the empowerment of local governments to encourage industrial compliance in their jurisdiction. This will be facilitated in limited training for selected local governments in Java and Sumatera. Given more resources, the capacity building for local governments must be prioritized and upscaled.</p> <p>Risk level should remain modest considering facts that identified coping strategies are left with government willingness</p> | |
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| | | | | and resources to engage with local governments. | |
| 3 | Lack of willingness for local staff and other stakeholders to participate in the trainings | Low Risk (L) | The training will deliver competences which will represent a competitive advantage for the career of people trained, and which will be useful not only on ESM of PCBs but also on the ESM of hazardous waste and chemicals. As a minimum, the project will benefit from the competences of the PCB inventory group already established at PPG stage. | <p>A comprehensive understanding of the importance and urgency for local governments to identify their roles, responsibilities and authorities in supporting national program of PCBs disposal has been appropriately accepted into local governments during the dissemination of MR P29/2020 on PCBs Management carried out last year in 2021.</p> <p>For instance, very positive feedbacks are obtained from the Provincial Environmental Office of West Java and Bangka Belitung to share resources to organize basic training on ESM of PCBs for the hosting and neighbouring provinces, districts and municipalities. These will be pilots for the training.</p> <p>Risk level remains Low.</p> | <input type="checkbox"/> |
| 4 | Delay in the identification or installation of a building to house the facility that will demonstrate an ESM of PCBs will affect the project implementation schedule | Modest Risk (M) | The operating entity will be selected during the initial phase of the project and their commitment secured. To assist the operating entity, prepare their own financial study, a business plan and several feasibility studies will be prepared. | <p>This risk is no longer relevant since the Operating Entity has been selected through a legitimate and valid mechanism facilitated by MoEF.</p> <p>PCBs Building has been established and comply to safety standard for PCBs handling and disposal, fully funded by the OE (as co-financing).</p> <p>Their portfolio as the largest and experienced hazardous waste management company should significantly contribute to the development of business model/plan.</p> <p>Risk level should change to Low.</p> | <input type="checkbox"/> |
| 5 | Delay in the issuance of environmental and other local permits will affect the project implementation schedule. | Modest Risk (M) | The selection of a Project Site or operating entity that has previous experience in obtaining environmental and other local permits for operation would reduce or eliminate this risk. | <p>The Local Government of Bogor has granted PPLI an official permit to collect and store oil feedstock for commissioning only.</p> <p>While permanent license for PCBs disposal is still under ongoing process, a license to disposal a total of 30 tonnes PCBs wastes has been granted from MoEF, to support the commissioning of non-thermal technology.</p> <p>Considering existing support from and positive coordination between UNIDO, PPLI and MoEF, it is realistic to expect that a permanent license for PCBs disposal will be granted following successful commissioning—as conveyed by MoEF during coordination and discussion.</p> | <input type="checkbox"/> |

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| | | | | Risk level change to Low . | |
| 6 | Inability of the OE to operate the selected technology to dispose PCBs and PCB containing equipment in an environmentally sound manner | Low Risk (L) | Trained Manager and operators of the Disposal Facility and an effective Monitoring and Evaluation component of the Project in place would reduce or eliminate this risk. | Although PPLI is an experienced wastes management company, but PPLI is new to a non-thermal technology that established at their site by the PCB Project. Training manager and operator of the facility being developed is ongoing. An initial online training has been carried out. An onsite/offline training will be organized to ensure proper understanding and skill for operating the facility (by September 2022). With their qualification and experience, Risk level remains Low . | <input type="checkbox"/> |
| 7 | Exposure of the operators and workers of the facilities and the community to the hazards of PCBs | Low Risk (L) | Extensive awareness raising campaigns and proper training will be undertaken to ensure that the community/ies, operators and workers of the facility understand the risks and impacts of PCBs to human health and environment. | As an experienced hazardous wastes management company, PPLI has implemented highest standard of safety for handling hazardous chemicals. Their previous experience in handling PCBs capacitors should set proper standard and minimize risks of exposures. In addition to that, operational manager and workers of PCBs facility in PPLI have been briefed about safety procedures and emergency response for PCBs handling by ELMA. Risk level remains Low . | <input type="checkbox"/> |
| 8 | Delay in the selection of the stakeholder to implement the public awareness component may affect the project implementation | Low Risk (L) | The establishment of selection criteria for the selection of stakeholders will reduce the risks. | This risk is no longer relevant since activities and outputs have been completely addressed in 2015 to 2016. Risk level remains Low . | <input type="checkbox"/> |
| 9 | Delay in installation and commissioning of PCBs disposal facility due to Covid-19 global pandemic and travel restriction | Modest Risk (M) | Maintaining adequate communication and coordination with the Ministry of Foreign Affairs to get updated on travel restriction policy from Italy and Malaysia as well as arrangement for working visas. | Installation has been completed to 100% despite minor adjustments are being carried out. At the moment, travel restriction amidst Covid-19 has been lifted by Government. While one recent dynamic emerges regarding delay in the transport of 100 litre PCBs as main materials/feedstock for commissioning, communication and coordination among PT. Goodyear, PPLI, MoEF and UNIDO hold strong as good basis for problem solving, Risk level remains Low . | <input checked="" type="checkbox"/> |
| 10 | Delays in project implementation and low-quality performance | Low Risk (L) | Carefully selected success indicators and the adaptive monitoring practice will enable timely implementation and high-quality results. | Continuous innovation and improvement in the design and implementation of project's activities are adopted as main principles to achieve identified outputs, outcomes and impacts of the PCB Project. Efficiency and effectiveness of such approach are verified under section VIII where more activities were executed and outputs are delivered beyond | |

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| | | | | <p>target to ensure achievement of project's main objectives.</p> <p>A project dashboard that is simultaneously updated has served as both monitoring tools for reviewing the progress of project implementation, as well as source of information for strategic development from time to time.</p> <p>Risk level remains Low.</p> | |
| 11 | The project could not identify sufficient amount of PCBs stockpiles to meet project's goal/target (disposal of 3,000 tons) | Modest Risk (M) | The 2nd phase of extended inventory is being planned with the support of Ministry of Industry, Ministry of Energy and Mineral Resources and PLN. The new inventory will target private company's transformers and PLN's offline transformers in Sumatra and Java. | <p>Two phases of Extended PBCs Inventory have been concluded, supported by the one carried out and accomplished by PLN with project's support. Current amount of PCBs identified and registered in the system is 2,851 tonnes.</p> <p>As PLN and other private sectors continue their inventory, more PBCs should be reported to MoEF.</p> <p>Risk level should change to Low.</p> | <input checked="" type="checkbox"/> |
| 12 | Delay in setting-up and/or agreeing on disposal cost of PCBs between OE and MoEF | Low Risk (L) | The Ministry of Environment and Forestry, in close coordination with the Ministry of Finance, is setting-up the most appropriate public-private partnership between governments (c.q. MoEF) and PT. PPLI in the operation of PCBs disposal facility. The selected mechanism shall influence the whole operational cost at PT. PPLI and eventually disposal cost. | <p>While price setting by PPLI would depend, among others, on rental cost defined by MoEF/Gol, PPLI has however set USD 5 covering handling, transport, storage and disposal cost in Jakarta, West Java, Banten and its vicinity. A competitive discount is also provided to potential client.</p> <p>The rental cost itself, despite would only be defined following handover, will be 50% lower than the approximated price set by Gol—as it supports national program.</p> <p>However, it should be anticipated that handling and disposal cost could be lowered in the future as investors are interested to established facility as a health competitor to PPLI. This should make handling and disposal cost more competitive and interesting to PCBs owners.</p> <p>Risk level remains Low.</p> | <input checked="" type="checkbox"/> |

2. If the project received a **sub-optimal risk rating (H. S)** in the previous reporting period, please state the **actions taken** since then to mitigate the relevant risks and improve the related risk rating. Please also elaborate on reasons that may have impeded any of the sub-optimal risk ratings from improving in the current reporting cycle; please indicate actions planned for the next reporting cycle to remediate this.

N/A

3. Please indicate any implication of the **COVID-19** pandemic on the progress of the project.

During the reporting period, high level of attention was given to the following items related to the PCB processing facility being installed at PPLI: (i) Completion of the installation; and (ii) Completion of the commissioning.

Previously Covid-19 has hindered mobilization of contractor's experts and engineers to complete the installation. Consequently, it took nearly two years from mobilization of equipment and spare parts in March 2020 to December 2021 when experts and engineers were finally allowed to enter Indonesia. Installation work was completed in February 2022 and a final inspection was carried out by early March 2022.

This delay mentioned above is compensated by the provision of the 4th no-cost extension until March 2023. However, the PCB Project had been severely impacted during the very critical phase of the project, which eventually multiplied their impacts on not only workplan agreed by MoEF, PPLI, ELMA and UNIDO, but also on the overall planning activities and necessary preparation to be made in the country (for example mobilization of feedstock, launching, etc).

4. Please clarify if the project is facing delays and is expected to request an **extension**.

The PCB Project has been granted the 4th no cost-extension until March 2023 to compensate time loss amidst Covid-19 severe restriction.

5. Please provide the **main findings and recommendations of completed MTR**, and elaborate on any actions taken towards the recommendations included in the report.

The following are recommendations provided by MTR and the latest status following adequate responses from the project:

1. Project to be extended beyond October 2018 by 1 year

Actions toward recommendation:

The PCB Project has been granted four (4) times no-cost extension for several reasons until March 2023

2. Review possibility of adopting it as a Ministerial Decree on Draft Official Guidance drafted, including Technical Code of Practice as Annex, and Economic Instrument and Incentive Mechanism

Actions toward recommendation:

Ministerial Regulation P29/2020 on PCBs Management was issued and adopted by Gol by December 2020 taking into account critical technical and administrative aspects from the Codes of Practices.

Economic Instrument and Incentive Mechanism has been developed, submitted and received by MoEF.

3. Research document on economic incentive drafted. The document can ensure making PCBs inventory the responsibility of the owner, ensure reporting on the status of PCBs in use. ensure targeted inspection programs, or other ad-hoc site inspections at PCB owners, and guidance on avoidance of cross-contamination

Actions toward recommendation:

PCBs Identification and Inventory have made industries' responsibilities are stipulated under MR P29/2020

4. For a continuation of PCB analysis, project to consider procuring the analysis equipment and transferring it to an appropriate laboratory, for eg. the BPPT

Actions toward recommendation:

PCBs Laboratory has been successfully established and accredited at BPPT (now BRIN). In addition two more laboratories are established and supported from the PCB Project, at PUSARPEDAL (now PSIKLH) and PLN

5. To draft procurement requirement to be started as soon as practically possible and Business Plan to be prepared regarding to the EMS of PCBs activities

Actions toward recommendation:

The drafting of business plan for OE is no longer considered as priority since the selected OE (PPLI) is an experienced hazardous wastes company with an extensive portfolio in the business

6. Consider to conduct one lecture/presentation (for eg. 45 mins.) in the Chemical Engineering Course at the National University to provide brief information on EMS of PCB project activities as part of public awareness raising activity.

Actions toward recommendation:

This has not been carried out due to limited personnel at PMU to perform multiple tasks

IV. Environmental and Social Safeguards (ESS)

1. As part of the requirements for **projects from GEF-6 onwards**, and based on the screening as per the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), which category is the project?

- Category A project
- Category B project
- Category C project

(By selecting Category C, I confirm that the E&S risks of the project have not escalated to Category A or B).

Please expand the table as needed.

| | E&S risk | Mitigation measures undertaken during the reporting period | Monitoring methods and procedures used in the reporting period |
|---|----------|--|--|
| (i) Risks identified in ESMP at time of CEO Endorsement | N/A | N/A | N/A |
| (ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box) | N/A | N/A | N/A |

V. Stakeholder Engagement

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes** regarding engagement of stakeholders in the project (based on the Stakeholder Engagement Plan or equivalent document submitted at CEO Endorsement/Approval).

Stakeholder engagement plan and strategy are specifically addressed in the project under Component 4 Awareness Raising and Advocacy Campaign. All activities under the respective component have been carried out in 2018 and outputs have been delivered, statistically, beyond target level. The expected outcome (c.q. increased public awareness on issues concerning PCBs) has been achieved as indicated, for example, by high level of interests and participation of industries in two phases of extended PCBs inventory (where more than 1,100 industries voluntarily participated) and high-level commitment and support provided by local governments in assisting the inventory team in the field.

Of challenges previously identified, these issues persist: limited knowledge, awareness and technical skills among local governments. On the other hand, new challenges emerge, such as:

1. A relatively short time for industries to accomplished PCBs inventory as the deadline is set on 31 December 2022 and the fact that the regulation was issued by the end of 2020 with very limited dissemination
2. Limited technical skill by industries, provided that facilitated forum for capacity building is nearly absence

To cope with the situation, stakeholder engagement strategy is both elaborated and developed through the following approaches:

1. Organization of training for local governments of selected provinces where most transformers and/or PCBs are identified
2. Technical backstopping for potential industries and industrial associations with large number of transformers and/or PCBs
3. Collaborate with private sectors to organize dissemination on regulation and technical aspects of ESM of PCBs
4. Development of value chains and business model, as well as pilot activity involving private sectors interesting in developing business around ESM of PCBs

For the latest strategy, the PCB Project engaged the following companies:

1. PT. Krakatau Daya Listrik, as owner of PCB-contaminated transformer and beneficiary of the pilot
2. PT. Hyprowira Adhitama, as service provider for transformers maintenance and retrofilling
3. PT. Prasadha Pamunah Limbah Industri, as PCBs wastes handling and disposal entity
4. M&I Materials Limited, as provider of high-grade/premium synthetic ester dielectric oil
5. PT. Ecoverse Indonesia Lestari, as consulting company on PCBs identification and management
6. PT. Petrolab Services Indonesia, as oil and lubricant testing laboratory; and
7. Clean Technology and Environment Center – National Research and Innovation Agency (BRIN), as accredited laboratory to perform GC-ECD analysis for PCBs

The Existing value chains, when empowered, should serve as mutual partner to disseminate and engage their client industries on ESM of PCBs. However, it should be monitored the effectiveness of these service providers to encourage ESM of PCBs among their clients industries. However, this is an approach that was oversight by the project but holds potential to lever compliance from industries through a mutual and competitive B-to-B approach. As ESM of PCBs can only be facilitated by ranges of industries forming complete value chains within the management system.

2. Please provide any feedback submitted by national counterparts, GEF OFP, co-financiers, and other partners/stakeholders of the project (e.g. private sector, CSOs, NGOs, etc.).

N/A

3. Please provide any **relevant stakeholder consultation** documents.

Project Steering Committee minutes:

4446_INS_PSC 2021 minutes.

Official letters regarding 4th no cost-extension:

4446_INS_4th No Cost Extension

VI. Gender Mainstreaming

1. Using the previous reporting period as a basis, please report on the **progress achieved on implementing gender-responsive measures and using gender-sensitive indicators**, as documented at CEO Endorsement/Approval (in the project results framework, gender action plan or equivalent).

The PCB Project has Gender Marker 1. It means the project has limited expected contribution to Gender. However, to the optimum extent possible, the PCB Project strives to integrate gender dimension in the planning and implementation of project activities, particularly under component 4 Awareness Raising and Advocacy Campaign. Information/messages disseminated throughout the campaign are harnessed with gender dimension, particularly on how PCBs might differently affect the health and welfare of men and women.

Instead of trying to enforce a balanced quota between women and men, the project prefers to put emphasis to quality interactions between women and men during various events and to facilitate exchange of perspectives of different sexes. A very strong case is the encounter of the fact that, while the PCB Project is interacting with male dominated industries (for instance oil and gas, pulp and paper and power generating), women are in fact dominating mid-level management the so-called Health Safety and Environment (HSE) units to whom the issues of ESM of PCBs is delegated by industries/owners of PCBs. In such a case, the project strives to empower the female managers with as much important concepts and information on ESM of PCBs. The PCB Project has found that the HSE female managers have been playing critical decision-making roles at later development of ESM of PCBs in their respective companies, for example at PT. Suzuki Indomobil Motor (female HSE officer) and at Indonesia Pulp and Paper Association (female Deputy Director of External Relation who responsible for, among others, capacity building on ESM of PCBs for its member companies).

VII. Knowledge Management

1. Using the previous reporting period as a basis, please elaborate on any **knowledge management activities / products**, as documented at CEO Endorsement / Approval.

During this reporting period, the PCB Project carry out and deliver knowledge management activities and products as follow:

Activities:

- Dissemination of Minister Regulation No. P29/2020 on PCBs Management to local governments: 34 provinces and 400 districts/municipals environmental offices participated;
- Training on Job Safety Analysis and Swab Test on Transformer for MoEF's staff (in cooperation with PT. Hyprowira Adhitama);
- Dissemination of retrofilling to decontaminate PCB-contaminated transformer for Indonesia Pulp and Paper Association;
- Webinar PCBs Impacts on Environment and Environmentally Sound Management of PCBs for industries, universities, laboratories, governments, NGOs and public;

Products:

- Compilation of Q&A from 12 dissemination of MR P29/2020 to local governments
- Compilation of Q&A from webinar on PCBs impact on environment
- Video productions from 12 dissemination of MR P29/2020 to local governments
- Updating content on PCBs Free Indonesia website (carried by MoEF)

The project has produced various brochures and leaflets/pamphlets which are developed for awareness – raising purposes.

2. Please list any **relevant knowledge management mechanisms / tools** that the project has generated.

The project has produced the following:

- Publication via YouTube (@PCB Free Indonesia) during the reporting period, among other are:
 - https://www.youtube.com/results?search_query=KLHK+diseminasi+peraturan+PCBs
 - <https://www.youtube.com/watch?v=FpiGT0UVRk>
 - <https://www.youtube.com/watch?v=PqxVxllLOOo>
 - https://www.youtube.com/watch?v=8lpHca_e0Fc
 - <https://www.youtube.com/watch?v=YYug-dufw7I>
 - <https://www.youtube.com/watch?v=noiTQALDGA0>
- One (1) website on PCBs free managed by MoEF: <https://pcbfreeindonesia.menlhk.go.id/>
- Project social media platform on Facebook (@PCBFreeIndonesia), Instagram (@PCBFreeIndonesia), and Twitter (@pcbfreeindo)

VIII. Implementation progress

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes achieved/observed** with regards to project implementation.

As reported previously, to consistently continue the previous pattern of quantification that has started since 2019, during the previous reporting period, the Project had made several adaptations to keep the tracking easier.

Project's outputs and milestones are transformed into quantifiable information based on their contribution to higher order levels (activities, outputs, impact indicators and the overall project's objectives).

Continuing the update submitted in the previous period where activities that have been promised by the PCB Project as indicated in the CEO endorsement are categorized as mandatory, which is sharing contribution to the Output achievement ratio. And there are also newly added activities that are important for a better result, which categorized as non-mandatory, and is calculated intact in its contribution to the Output achievement ratio.

During the reporting period, progress and achievements are quantified **in red marks** for mandatory outputs (those stipulated in the Project Document) and **in blue marks** for total achievement combining mandatory and non-mandatory outputs. These **blue marks** should be interpreted as efficiency made by the PCB Project. For example, instead of one PCBs Laboratory, the project has successfully established two laboratories and one additional support to PLN's existing laboratory. Also, the same case for two phases of PCBs inventory carried out (in Java and Sumatera) from only one mandatory (for Java only).

It should also be considered as necessary innovations developed by the project, in order to cope with recent and real situations and conditions previously not anticipated by the Project Document, but are found critical to deliver the overall outcomes of each component and, hence, to address project's main objectives. The highest percentage under each output, the higher efficiency and/or innovation introduced under that section or component. Detailed progress is as follow:

1. Component 1 (Outcome): Policy and Regulatory Framework: (100%) (100%)
 - a. Output 1.1 Policy and regulatory framework reviewed, formulated and adopted: (100%) (100%)
 - b. Output 1.2 Economic and market-based incentives proposed for disposal of PCB-containing equipment and wastes: (100%) (100%)
2. Component 2 (Outcome): Institutional Capacity Building and Development: (94%) (494%)
 - a. Output 2.1 Technical and human resources capacity for PCB management strengthened: (88%) (788%)
 - b. Output 2.2 Extended inventory on PCBs undertaken in selected provinces covering at least Java Island: (100%) (200%)
3. Component 3 (Outcome): Pilot ESM of PCBs: (86%) (152%)
 - a. Output 3.1 Operating entity selected: (91%) (91%)

- b. Output 3.2 Pilot ESM system for PCBs established on the above sites including labelling, registration, transportation: (100%) (100%)
- c. Output 3.3 An overall amount of 3000 tons PCB wastes disposed of and PCB-containing equipment decontaminated based on selected technical options: (68%) (261%)
- 4. Component 4 (Outcome): Awareness Raising and Advocacy Campaign: (100%) (154%)
 - a. Output 4.1 Stakeholder engagement including NGOs and civil society established: (100%) (100%)
 - b. Output 4.2 Development and implementation of training and awareness programs: (100%) (207%)
- 5. Component 5 (Outcome): Monitoring and Evaluation: (67%) (70%)
 - a. Output 5.1.: M&E mechanism designed and implemented: (67%) (70%)

Meanwhile, quantification based on the activities described in the CEO endorsement document (mandatory only) contributed to the **Project Objective level** is (89%) (194%)

Key Impact Indicators (KII) are also very relevant to measure project's contribution to the establishment of ESM of PCBs in the country (impact level). Project's calculation to KIIs reflects not only project's strength, but also the most challenging parts where the remaining focus of the project's should be allocated, such as:

- **KII 1:** Regulatory instrument on PCB adopted **100%**
 - **KII 2:** Disposal facility established, tested and permitted for an overall disposal capacity suitable to cover or exceed project needs compliant with the requirement of Stockholm Convention **71%**
 - **KII 3:** Amount of PCBs equipment, which have been already identified and registered in the project database, committed for disposal (equipment weight) **100%**
 - **KII 4:** Amount of PCBs equipment treated (weight of PCBs containing equipment) **1.14%**
- Overall project's impact: 68%**

2. Please briefly elaborate on any **minor amendments**⁵ to the approved project that may have been introduced during the implementation period or indicate as not applicable (NA).

Please tick each category for which a change has occurred and provide a description of the change in the related textbox. You may attach supporting documentation, as appropriate.

| | | |
|-------------------------------------|---|---|
| <input type="checkbox"/> | Results Framework | |
| <input type="checkbox"/> | Components and Cost | |
| <input type="checkbox"/> | Institutional and Implementation Arrangements | |
| <input type="checkbox"/> | Financial Management | |
| <input checked="" type="checkbox"/> | Implementation Schedule | This project is under the 4 th no-cost extension, to be implemented until 31 March 2023. |
| <input type="checkbox"/> | Executing Entity | |
| <input type="checkbox"/> | Executing Entity Category | |
| <input type="checkbox"/> | Minor Project Objective Change | |
| <input type="checkbox"/> | Safeguards | |
| <input type="checkbox"/> | Risk Analysis | |
| <input type="checkbox"/> | Increase of GEF Project Financing Up to 5% | |
| <input type="checkbox"/> | Co-Financing | |


⁵ As described in Annex 9 of the *GEF Project and Program Cycle Policy Guidelines*, **minor amendments** are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5%.

| | | |
|--------------------------|--------------------------------|--|
| <input type="checkbox"/> | Location of Project Activities | |
| <input type="checkbox"/> | Others | |

3. Please provide progress related to the financial implementation of the project.

Total financial implementation (project's disbursement) as of 30 June 2022 is USD 5,459,019.10 which accounts for 91% of the GEF Grant. Component 3 accounts for 64% of the total expenditures.

Description of main expenditures (by major outputs/WBS) is provided in the project delivery report below.

| | | | | | | | | | |
|---|-----------------------------------|--------------------------------|--------------------------|-----------------------|--|-------------------------|-------------------------|---------------------------------|-----------------------------------|
|  | | PROJECT DELIVERY REPORT | | Project: | 130249 - INTRODUCTION OF AN ENVIRONMENTALLY SOUND MANAGEMENT AND DISPOSAL SYSTEM FOR PCBs WASTES AND PCB-CONTAMINATED EQUIPMENT IN INDONESIA (PIF) | Project Manager: | Carmela Centeno | Project Validity Status: | 01.11.2013 - 31.03.2023 Implement |
| Reporting Period: | | 10.10.2013 - 30.06.2022 | | Project Theme: | Energy and Environment | Country: | Indonesia | Region: | Asia and Pacific |
| Sponsor Nr. | Sponsor | Grant | Grant Description | Fund | Currency | Grant Status | Grant Validity | | |
| 400150 | GEF - Global Environment Facility | 2000002465 | INDONESIA: FSP - ESM | GF | USD | Authority to implement | 10.10.2013 - 31.03.2023 | | |

| | Description | Released Budget Current Year (a) | Obligations Current Year (b) | Disbursements Current Year (c) | Expenditures Current Year (d=b+c) | Total Agreement Budget (e) | Released Budget (f) | Obligations + Disbursements (g) | Funds Available* (h=f-g) | Support Cost (i) | Total Expenditures (j=g+i) |
|----------------|------------------------------------|----------------------------------|------------------------------|--------------------------------|-----------------------------------|----------------------------|---------------------|---------------------------------|--------------------------|------------------|----------------------------|
| 2000002465 | | | | | | | | | | | |
| 130249-1-01-01 | Framework reviewed | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 663.27 | 663.27 | 663.27 | 0.00 | 0.00 | 663.27 |
| 1700 | Nat.Consult./Staff | 4,350.06 | 0.00 | 0.00 | 0.00 | 24,494.60 | 24,494.60 | 20,144.54 | 4,350.06 | 0.00 | 20,144.54 |
| 2100 | Contractual Services | 3,999.42 | 0.00 | 0.00 | 0.00 | 21,726.04 | 21,726.04 | 17,726.62 | 3,999.42 | 0.00 | 17,726.62 |
| 3000 | Train/Fellowship/Study | 160.34 | 0.00 | 0.00 | 0.00 | 11,882.67 | 11,882.67 | 11,722.33 | 160.34 | 0.00 | 11,722.33 |
| 3500 | International Meetings | (698.03) | (869.99) | 199.77 | (670.22) | 3,756.55 | 3,756.55 | 3,784.36 | (27.81) | 0.00 | 3,784.36 |
| 5100 | Other Direct Costs | (954.95) | (900.27) | (39.09) | (939.36) | 1,836.42 | 1,836.42 | 1,852.01 | (15.59) | 0.00 | 1,852.01 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5,589.35 | 5,589.35 |
| 130249-1-01-01 | Total | 6,856.84 | (1,770.26) | 160.68 | (1,609.58) | 64,359.55 | 64,359.55 | 55,893.13 | 8,466.42 | 5,589.35 | 61,482.48 |
| 130249-1-01-02 | Economic & Market-based Incentives | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 299.31 | 299.31 | 299.31 | 0.00 | 0.00 | 299.31 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 363.80 | 363.80 | 363.80 | 0.00 | 0.00 | 363.80 |
| 1700 | Nat.Consult./Staff | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2100 | Contractual Services | 39,657.96 | 0.00 | 0.00 | 0.00 | 79,039.88 | 79,039.88 | 39,381.92 | 39,657.96 | 0.00 | 39,381.92 |
| 3000 | Train/Fellowship/Study | 0.00 | 0.00 | 0.00 | 0.00 | 7,256.90 | 7,256.90 | 7,256.90 | 0.00 | 0.00 | 7,256.90 |
| 5100 | Other Direct Costs | 1,506.46 | 0.00 | 0.00 | 0.00 | 1,749.97 | 1,749.97 | 243.51 | 1,506.46 | 0.00 | 243.51 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4,754.55 | 4,754.55 |
| 130249-1-01-02 | Total | 41,164.42 | 0.00 | 0.00 | 0.00 | 88,709.86 | 88,709.86 | 47,545.44 | 41,164.42 | 4,754.55 | 52,299.99 |

| 130249-1-02-01 Capacity on PCB management | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
|--|----------------------------|-------------------|--------------------|-------------------|-------------------|---------------------|---------------------|---------------------|-------------------|-------------------|---------------------|
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 890.73 | 890.73 | 890.73 | 0.00 | 0.00 | 890.73 |
| 1500 | Local travel | 5,901.13 | 0.00 | 418.42 | 418.42 | 35,349.82 | 35,349.82 | 29,867.11 | 5,482.71 | 0.00 | 29,867.11 |
| 1700 | Nat.Consult./Staff | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2100 | Contractual Services | 11.02 | 0.00 | 0.00 | 0.00 | 210,736.15 | 210,736.15 | 210,725.13 | 11.02 | 0.00 | 210,725.13 |
| 3000 | Train/Fellowship/Study | 3,715.57 | 0.00 | 0.00 | 0.00 | 12,866.07 | 12,866.07 | 9,150.50 | 3,715.57 | 0.00 | 9,150.50 |
| 3500 | International Meetings | 0.00 | 0.00 | 0.00 | 0.00 | 47,458.07 | 47,458.07 | 47,458.07 | 0.00 | 0.00 | 47,458.07 |
| 4300 | Premises | 0.00 | 0.00 | 0.00 | 0.00 | 419.55 | 419.55 | 419.55 | 0.00 | 0.00 | 419.55 |
| 4500 | Equipment | 0.00 | 0.00 | 9.90 | 9.90 | 3,291.07 | 3,291.07 | 3,300.97 | (9.90) | 0.00 | 3,300.97 |
| 5100 | Other Direct Costs | 29.01 | 0.00 | 0.00 | 0.00 | 3,397.09 | 3,397.09 | 3,368.08 | 29.01 | 0.00 | 3,368.08 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30,517.98 | 30,517.98 |
| 130249-1-02-01 Total | | 9,656.73 | 0.00 | 428.32 | 428.32 | 314,408.55 | 314,408.55 | 305,180.14 | 9,228.41 | 30,517.98 | 335,698.12 |
| 130249-1-02-02 Laboratory capacity strengthened | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 4,876.00 | 4,876.00 | 4,876.00 | 0.00 | 0.00 | 4,876.00 |
| 1700 | Nat.Consult./Staff | 0.00 | 0.00 | 0.00 | 0.00 | 25,314.11 | 25,314.11 | 25,314.11 | 0.00 | 0.00 | 25,314.11 |
| 2100 | Contractual Services | 17,734.03 | 0.00 | 0.00 | 0.00 | 697,435.61 | 697,435.61 | 659,701.58 | 37,734.03 | 0.00 | 659,701.58 |
| 3000 | Train/Fellowship/Study | 939.48 | 0.00 | 0.00 | 0.00 | 1,792.44 | 1,792.44 | 852.96 | 939.48 | 0.00 | 852.96 |
| 3500 | International Meetings | 0.00 | 0.00 | 0.00 | 0.00 | 15,837.90 | 15,837.90 | 15,837.90 | 0.00 | 0.00 | 15,837.90 |
| 4500 | Equipment | 0.00 | 0.00 | 9.90 | 9.90 | 326,521.45 | 326,521.45 | 326,531.35 | (9.90) | 0.00 | 326,531.35 |
| 5100 | Other Direct Costs | 0.00 | 0.00 | 0.00 | 0.00 | 46,033.54 | 46,033.54 | 46,033.54 | 0.00 | 0.00 | 46,033.54 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 107,914.67 | 107,914.67 |
| 130249-1-02-02 Total | | 18,673.51 | 0.00 | 9.90 | 9.90 | 1,117,811.05 | 1,117,811.05 | 1,079,147.44 | 38,663.61 | 107,914.67 | 1,187,062.11 |
| 130249-1-03-01 Operating entity selected | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3000 | Train/Fellowship/Study | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4500 | Equipment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 130249-1-03-01 Total | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 130249-1-03-02 Pilot ESM system established | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 2,570.04 | 0.00 | 0.00 | 0.00 | 67,791.01 | 67,791.01 | 65,220.97 | 2,570.04 | 0.00 | 65,220.97 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 5,579.22 | 5,579.22 | 5,579.22 | 0.00 | 0.00 | 5,579.22 |
| 1700 | Nat.Consult./Staff | 0.00 | 0.00 | 0.00 | 0.00 | 23,824.40 | 23,824.40 | 23,824.40 | 0.00 | 0.00 | 23,824.40 |
| 2100 | Contractual Services | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3000 | Train/Fellowship/Study | 2,091.21 | 0.00 | 0.00 | 0.00 | 20,116.76 | 20,116.76 | 18,025.55 | 2,091.21 | 0.00 | 18,025.55 |
| 3500 | International Meetings | 0.00 | 0.00 | 0.00 | 0.00 | 5,515.65 | 5,515.65 | 5,515.65 | 0.00 | 0.00 | 5,515.65 |
| 4500 | Equipment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5100 | Other Direct Costs | 0.00 | 0.00 | 0.00 | 0.00 | 1,236.13 | 1,236.13 | 1,236.13 | 0.00 | 0.00 | 1,236.13 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11,940.17 | 11,940.17 |
| 130249-1-03-02 Total | | 4,661.25 | 0.00 | 0.00 | 0.00 | 124,063.17 | 124,063.17 | 119,401.92 | 4,661.25 | 11,940.17 | 131,342.09 |
| 130249-1-03-03 Establishment of PCB treatment facility | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 20,607.52 | 4,291.90 | 1,362.97 | 5,654.87 | 49,178.51 | 49,178.51 | 34,225.86 | 14,952.65 | 0.00 | 34,225.86 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 61,292.47 | 61,292.47 | 33,246.51 | 28,045.96 | 0.00 | 33,246.51 |
| 1700 | Nat.Consult./Staff | 93,944.56 | 29,066.47 | 30,254.97 | 59,321.44 | 162,527.21 | 162,527.21 | 127,904.09 | 34,623.12 | 0.00 | 127,904.09 |
| 2100 | Contractual Services | 314,268.66 | (125,872.93) | 219,113.78 | 93,240.85 | 2,967,531.60 | 2,967,531.60 | 2,746,503.79 | 221,027.81 | 0.00 | 2,746,503.79 |
| 3000 | Train/Fellowship/Study | 47,504.40 | 0.00 | 4,696.57 | 4,696.57 | 49,036.30 | 49,036.30 | 6,228.47 | 42,807.83 | 0.00 | 6,228.47 |
| 3500 | International Meetings | 1,233.55 | 0.00 | 0.00 | 0.00 | 2,172.44 | 2,172.44 | 938.89 | 1,233.55 | 0.00 | 938.89 |
| 4500 | Equipment | 23,298.41 | 0.00 | 79.29 | 79.29 | 413,229.84 | 413,229.84 | 390,010.72 | 23,219.12 | 0.00 | 390,010.72 |
| 5100 | Other Direct Costs | 14,827.49 | 1,045.95 | 3,363.79 | 4,409.74 | 17,547.00 | 17,547.00 | 7,129.25 | 10,417.75 | 0.00 | 7,129.25 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 334,618.79 | 334,618.79 |
| 130249-1-03-03 Total | | 515,684.59 | (91,468.61) | 258,871.37 | 167,402.76 | 3,722,515.37 | 3,722,515.37 | 3,346,187.58 | 376,327.79 | 334,618.79 | 3,680,806.37 |
| 130249-1-04-01 Stakeholder engagement established | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2100 | Contractual Services | 0.00 | 0.00 | 0.00 | 0.00 | 105,283.50 | 105,283.50 | 105,283.50 | 0.00 | 0.00 | 105,283.50 |
| 3000 | Train/Fellowship/Study | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4500 | Equipment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5100 | Other Direct Costs | 0.00 | 0.00 | 0.00 | 0.00 | 7.69 | 7.69 | 7.69 | 0.00 | 0.00 | 7.69 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 10,529.12 | 10,529.12 |
| 130249-1-04-01 Total | | 0.00 | 0.00 | 0.00 | 0.00 | 105,291.19 | 105,291.19 | 105,291.19 | 0.00 | 10,529.12 | 115,820.31 |
| 130249-1-04-02 Development of Awareness Raising Prog. | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1700 | Nat.Consult./Staff | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2100 | Contractual Services | 0.00 | 0.00 | 0.00 | 0.00 | 44,716.50 | 44,716.50 | 44,716.50 | 0.00 | 0.00 | 44,716.50 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4,471.65 | 4,471.65 |
| 130249-1-04-02 Total | | 0.00 | 0.00 | 0.00 | 0.00 | 44,716.50 | 44,716.50 | 44,716.50 | 0.00 | 4,471.65 | 49,188.15 |

| 130249-1-51-01 Project Management | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
|-----------------------------------|----------------------------|------------|-------------|------------|------------|--------------|--------------|--------------|------------|------------|--------------|
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 17,528.41 | 17,528.41 | 17,528.41 | 0.00 | 0.00 | 17,528.41 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 4,451.70 | 4,451.70 | 4,451.70 | 0.00 | 0.00 | 4,451.70 |
| 1700 | Nat.Consult./Staff | (367.78) | (367.78) | | (367.78) | 255,897.21 | 255,897.21 | 255,897.21 | 0.00 | 0.00 | 255,897.21 |
| 3000 | Train/Fellowship/Study | 0.00 | 0.00 | 0.00 | 0.00 | 4,304.26 | 4,304.26 | 4,304.26 | 0.00 | 0.00 | 4,304.26 |
| 4300 | Premises | 0.00 | 0.00 | 0.00 | 0.00 | 289.17 | 289.17 | 289.17 | 0.00 | 0.00 | 289.17 |
| 4500 | Equipment | 0.00 | 0.00 | 19.80 | 19.80 | 3,365.06 | 3,365.06 | 3,384.86 | (19.80) | 0.00 | 3,384.86 |
| 5100 | Other Direct Costs | 50.28 | 0.00 | 3.49 | 3.49 | 15,051.62 | 15,051.62 | 15,004.83 | 46.79 | 0.00 | 15,004.83 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 30,086.05 | 30,086.05 |
| 130249-1-51-01 Total | | (317.50) | (367.78) | 23.29 | (344.49) | 300,887.43 | 300,887.43 | 300,860.44 | 26.99 | 30,086.05 | 330,946.49 |
| 130249-1-51-02 Monitoring | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 4,948.75 | 4,948.75 | 4,948.75 | 0.00 | 0.00 | 4,948.75 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 2,988.77 | 2,988.77 | 2,988.77 | 0.00 | 0.00 | 2,988.77 |
| 1700 | Nat.Consult./Staff | 0.00 | 0.00 | 0.00 | 0.00 | 20,160.06 | 20,160.06 | 20,160.06 | 0.00 | 0.00 | 20,160.06 |
| 2100 | Contractual Services | 0.00 | 0.00 | 0.00 | 0.00 | 2,217.82 | 2,217.82 | 2,217.82 | 0.00 | 0.00 | 2,217.82 |
| 3000 | Train/Fellowship/Study | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5100 | Other Direct Costs | 4,255.88 | 0.00 | 0.00 | 0.00 | 5,920.93 | 5,920.93 | 1,665.05 | 4,255.88 | 0.00 | 1,665.05 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3,198.06 | 3,198.06 |
| 130249-1-51-02 Total | | 4,255.88 | 0.00 | 0.00 | 0.00 | 36,236.33 | 36,236.33 | 31,980.45 | 4,255.88 | 3,198.06 | 35,178.51 |
| 130249-1-53-01 Evaluation | | USD | USD | USD | USD | USD | USD | USD | USD | USD | USD |
| 1100 | Staff & Intern Consultants | 0.00 | 0.00 | 0.00 | 0.00 | 61,001.00 | 61,001.00 | 7,562.50 | 53,438.50 | 0.00 | 7,562.50 |
| 1500 | Local travel | 0.00 | 0.00 | 0.00 | 0.00 | 10,000.00 | 10,000.00 | 0.00 | 10,000.00 | 0.00 | 0.00 |
| 1700 | Nat.Consult./Staff | 3,767.91 | 7,303.19 | 7,720.68 | 15,023.87 | 10,000.00 | 10,000.00 | 15,023.87 | (5,023.87) | 0.00 | 15,023.87 |
| 5100 | Other Direct Costs | 0.00 | 0.00 | 228.50 | 228.50 | 0.00 | 0.00 | 228.50 | (228.50) | 0.00 | 228.50 |
| 9300 | Support Cost IDC | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2,281.50 | 2,281.50 |
| 130249-1-53-01 Total | | 3,767.91 | 7,303.19 | 7,949.18 | 15,252.37 | 81,001.00 | 81,001.00 | 22,814.87 | 58,186.13 | 2,281.50 | 25,096.37 |
| 2000002465 Total | | 604,403.63 | (86,303.46) | 267,442.74 | 181,139.28 | 6,000,000.00 | 6,000,000.00 | 5,459,019.10 | 540,980.90 | 545,901.89 | 6,004,920.99 |
| 130249 USD Total | | 604,403.63 | (86,303.46) | 267,442.74 | 181,139.28 | 6,000,000.00 | 6,000,000.00 | 5,459,019.10 | 540,980.90 | 545,901.89 | 6,004,920.99 |

* Does not include Unapproved Obligations

IX. Work Plan and Budget

1. Please provide an updated project work plan and budget for the remaining duration of the project, as per last approved project extension. Please expand/modify the table as needed.

| Outputs by Project Component | Year 2022 | | Year 2023 | GEF Grant Budget Available (US\$) |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-----------------------------------|
| | Q3 | Q4 | Q1 | |
| Component 1: Policy and Regulatory Framework | | | | |
| Outcome 1: Legislation and policies on PCB management, including incentive mechanism, adopted and endorsed to meet relevant obligations under the Convention | | | | |
| Output 1.1. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | USD 49,630.84 |
| Remaining Activity: | | | | |
| • Dissemination of MR P29/2020 to industries. | | | | |
| Output 1.2. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Component 2: Institutional capacity building and development | | | | |
| Outcome 2: Strengthened institutional capacities at central government and provincial level in selected provinces | | | | |
| Output 2.1. | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | USD 9,228.41 |
| Remaining Activity: | | | | |
| • Training technical aspect of MR P29/2020 to government at Province, District, and Cities levels. | | | | |
| • Conduction of a refresher training to PCBs web operators of MoEF. | | | | |
| Output 2.2. | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | USD 38,663.61 |
| Remaining Activity: | | | | |
| • Preparation and implementation of handover. | | | | |

| | | | | |
|--|-------------------------------------|-------------------------------------|-------------------------------------|----------------|
| <ul style="list-style-type: none"> Technical assistance and capacity building on PCBs Management provided for PLN | | | | |
| Component 3: ESM of PCBs | | | | |
| Outcome 3: ESM of PCBs through proper collection, packaging, registration, labelling, transportation, storage and disposal of targeted PCB wastes and PCBs-contaminated equipment demonstrated | | | | |
| Output 3.1. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0.00 |
| Output 3.2. Remaining Activity: <ul style="list-style-type: none"> PCBs disposal facility operation and troubleshooting training for Operating Entity. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | USD 4,661.25 |
| Output 3.3. Remaining Activity: <ul style="list-style-type: none"> Commissioning of the facility in PPLI. Facility launching. Review of environment survey result on PCBs pollutant surround PPLI. Report provided by PPLI. Treatment maximum 3,000-tons of PCB wastes. | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | USD 376,327,79 |
| Component 4: Public awareness raising and advocacy campaigns | | | | |
| Outcome 4: Increased public awareness on issues concerning PCBs | | | | |
| Output 4.1. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0.00 |
| Output 4.2. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 0.00 |
| Component 5: Monitoring and Evaluation | | | | |
| Outcome 5: Effective project monitoring and evaluation implemented | | | | |
| Output 5.1. Remaining Activity: <ul style="list-style-type: none"> Project Implementation Report 2022 (June), Project annual report 2022 (October), and Workplan 2023 (November). Technical expert from involvement during commissioning stage of PCBs disposal facility in PPLI. Conduction of PSC Meeting of year 2022. Terminal External Evaluation (by External Auditor). Terminal report preparation. Internal meeting of PMU (strategic meeting). Project dissemination and closing workshop. Project handover (BAST) and administrative closing. | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | USD 62,469.00 |

X. Synergies

1. Synergies achieved:

Since February 2018, the project has been collaboratively working with the World Bank (WB) Indonesia and Asian Development Bank (ADB) Indonesia to support capacity building for PLN, the State Electrical Company. The synergy was manifested in training collaboration under "Power Distribution Development Program for Results (PforR) Project for Indonesia" covering Sumatera Island and ADB's Results-Based Lending Projects "Electricity Grid Strengthening in Sumatera" and "Electricity Grid Development Program in Eastern Indonesia".

PLN is important partner with whom the project collaborates since the preparation of this project (during project preparation grant). Synergy with PLN has been extended to the 2nd PCBs Extended Inventory, where 5,000 units of PLN's offline transformers are being collected and tested for PCB-contamination and the improvement of PLN's Laboratory for PCBs Analysis by the provisions of Automated Sample Preparation unit and its auxiliaries provided by the project.

A good synergy has also been established with the Indonesian Association of Iron and Steel Manufactures and Indonesia Pulp and Paper Association. Both associations facilitate engagement and coordination between the PCBs Project and their member industries.

Synergy with service companies is established to develop SOP on retrofilling as a mean to decontaminate online/operational PCB-contaminated transformer. This pilot is critical to demonstrate best practice to handle PCB-contaminated transformer and to inform PCBs owners that relevant value chain is available to solve their PCBs problem. Result and achievement from the first pilot is to be upscaled inviting potential companies.

3. Stories to be shared (Optional)

When the project started in late 2013, there were challenging situations to project implementation, such as:

1. No specific regulation and technical guidance on PCBs sound management existed in the country;
2. No basic knowledge and experience to develop effective and efficient strategy for PCBs inventory;
3. No companies (value chains) provided wide range of service to support one or several steps on ESM of PCBs
4. No technical and management skill owned by owners of PCBs sources

The above conditions resulted in significant delay to the initiation of technical activity, particularly on inventory and selection of technology. Both are related, since selection of technology should consider profile of PCBs contamination inventoried in the country. In such situation, it became very critical to have an adopted regulation and policy directive as the basis of planning and strategy development (policy and regulation is the first principle/stage on ESM of PCBs).

Two phases of inventory were carried. Significant lesson is gathered from the 1st inventory which resulted in increased contamination rate from 4% to 9%. To improve efficiency and effectiveness of inventory in order to found PCBs, the followings lesson learned should be considered:

1. Focusing on identifying older transformer. From Indonesia's experience, the older the transformer, the higher contamination rate. For population of transformers manufactured in 1985 or older, contamination rate is 18%;
2. Focusing on transformers manufactured in and older than 1985, but selecting those manufactured from producing countries (10 countries registered by UNEP), contamination rate is 30%; and
3. Inventory must be concentrated on companies established before 1985, particularly on sectors developed within the era, for example oil and gas, chemicals, power generation and textile.

To encourage industries compliance on planning and implementation on ESM of PCBs, service companies should exist to provide technical and consultation supports to industries. In Indonesia, several services companies providing services for sampling, PCBs analysis and management consultation. If did not exist, the project should facilitate the creation of value chains.

Technical backstopping to industries should be considered in any design, especially in countries where no established service value chains existed, as in Indonesia. Without sufficient technical and management skills it would be very challenging for industries to adopt steps and activities to implement ESM of PCBs.

EXPLANATORY NOTE

1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2021 – 30 June 2022.
2. **Responsibility:** The responsibility for preparing the report lies with the project manager in consultation with the Division Chief and Director.
3. **Evaluation:** For the report to be used effectively as a tool for annual self-evaluation, project counterparts need to be fully involved. The (main) counterpart can provide any additional information considered essential, including a simple rating of project progress.
4. **Results-based management:** The annual project/programme progress reports are required by the RBM programme component focal points to obtain information on outcomes observed.

| Global Environmental Objectives (GEOs) / Development Objectives (DOs) ratings | |
|---|---|
| Highly Satisfactory (HS) | Project is expected to achieve or exceed <u>all</u> its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”. |
| Satisfactory (S) | Project is expected to <u>achieve most</u> of its <u>major</u> global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings. |
| Moderately Satisfactory (MS) | Project is expected to <u>achieve most</u> of its major <u>relevant</u> objectives but with either significant shortcomings or modes overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environmental benefits. |
| Moderately Unsatisfactory (MU) | Project is expected to achieve <u>some</u> of its major global environmental objectives with major shortcomings or is expected to <u>achieve only some</u> of its major global environmental objectives. |
| Unsatisfactory (U) | Project is expected <u>not</u> to achieve <u>most</u> of its major global environmental objectives or to yield any satisfactory global environmental benefits. |
| Highly Unsatisfactory (HU) | The project has failed to achieve, and is not expected to achieve, <u>any</u> of its major global environmental objectives with no worthwhile benefits. |

| Implementation Progress (IP) | |
|---------------------------------------|---|
| Highly Satisfactory (HS) | Implementation of <u>all</u> components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as “good practice”. |
| Satisfactory (S) | Implementation of <u>most</u> components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action. |
| Moderately Satisfactory (MS) | Implementation of <u>some</u> components is in substantial compliance with the original/formally revised plan with some components requiring remedial action. |
| Moderately Unsatisfactory (MU) | Implementation of <u>some</u> components is <u>not</u> in substantial compliance with the original/formally revised plan with most components requiring remedial action. |
| Unsatisfactory (U) | Implementation of <u>most</u> components is <u>not</u> in substantial compliance with the original/formally revised plan. |
| Highly Unsatisfactory (HU) | Implementation of <u>none</u> of the components is in substantial compliance with the original/formally revised plan. |

| Risk ratings | |
|--|---|
| Risk ratings will assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale: | |
| High Risk (H) | There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks. |
| Substantial Risk (S) | There is a probability of between 51% and 75% that assumptions may fail to hold or materialize, and/or the project may face substantial risks. |
| Moderate Risk (M) | There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only moderate risk. |
| Low Risk (L) | There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only low risks. |