

UNIDO**ONUDI**

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
ORGANISATION DES NATIONS UNIES POUR LE DEVELOPPEMENT INDUSTRIEL

Progress Report
(01 July 2018 – 30 June 2019)

Name of countries: Cambodia, Lao PDR, Mongolia, Philippines Vietnam

Title¹	Demonstration of BAT and BEP in open burning activities in response to the Stockholm Convention on POPs.
GEF ID:	5082
UNIDO SAP ID:	150033
GEF Replenishment Cycle:	GEF 5
GEF Focal Area:	Persistent Organic Pollutants (POPs)
Integrated Approach Pilot (IAP) Programs²:	(select)
GEF Project Size:	Full-Sized Project (FSP)
UNIDO PTC Department:	Department of Environment (ENV)
UNIDO Project Manager:	Carmela Centeo

I. Brief description of the project

I.1 Objective:

The project aims to create resource efficient waste management systems to reduce U-POPs emissions through the introduction of BAT/BEP in open burning sources and achieve a reduction of approx. 90% of current PCDD/PCDF releases at the pilot demonstration activities in the participating countries.

The project components include (i) Legislation Improvement; (ii) Institutional Strengthening; (iii) Demonstration Activities on pilot sites and (iv) Education and Awareness Raising and (v) Monitoring & Evaluation. Particularly, the framework of the project foresees the following outcomes: Outcome 1: Strengthened legislative capacity for introducing BAT/BEP in waste open burning source category; Outcome 2: Enhanced institutional capacity to carry out BAT/BEP implementation; Outcome 3: BAT/BEP implemented in open burning sources; Outcome 4: Improved knowledge and understanding on BAT/BEP and on risks connected with U-POPS, GHG emissions and other contaminants released through open burning; Outcome 5: Established project management structure and the system for monitoring/evaluation of project impacts.

The Project supports the participating countries in fulfilling the objectives reported in the NIPs and specific national plans. The project involves major stakeholders, e.g. ministries, municipalities, local authorities, research and academic institutions, and universities and environmental NGO as executing partners while the private sector are also being tapped. The demonstrations sites shall showcase the implementation of BAT/BEP, and making a shift from burning of waste to recycling or re-use.

¹ As per approved CEO Endorsement document

² Only for **GEF-6 projects**, if applicable

I.2 Baseline:

The Open burning sector, according to the PCDD/PCDFs inventories of the participating countries has been recognized as one of the leading sources of U-POPs. This is mainly due to the insufficient regulatory frameworks to address open burning, U-POPs emissions control and BAT/BEPs, low institutional capacity to manage waste, the non-standardized inventory of waste disposal, limited education and training on waste management and its non-inclusion in education at the university level, low women participation and the non-capability of laboratories to carry out UPOPs monitoring. In short, waste management that should have included BAT/BEPs, waste recycling, reuse, composting/waste-to-energy, etc. are generally not implemented and external financial and technical assistance is required.

II. Targeted results and progress to-date

II.1 Describe in tabular form the project's progress made in achieving its 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	Target level	Progress to-date
Component 1 – Legislation Improvement			
Outcome 1: STRENGTHENED LEGISLATIVE CAPACITY FOR INTRODUCING BAT/BEP IN WASTE OPEN BURNING SECTOR			
Output 1.1: Updated legal and regulatory frameworks for open burning to facilitate waste management improvements and BAT/BEP implementation, and to enable introduction of financing mechanisms.	<p>Number of regulations aimed to discourage open burning in national legislations; existence of legal framework to enable incentive systems and financial support for integrated waste management systems. Availability of guidelines/guidance documents on BAT/BEP and incentive systems/financing mechanisms in participating countries.</p> <p>Number of persons trained (male female).</p>	<p>Inclusion of regulations aimed to discourage open burning in national legislations; setting up the legal framework to enable incentive systems and financial support for integrated waste management systems.</p> <p>Introduction of financing mechanisms and incentive systems in the updated legislation in support of BAT/BEP implementation.</p> <p>One toolkit for waste management and 1 manual for financing mechanisms/incentive systems in each participating country.</p> <p>At least one regional training program (training of trainers) with 4 trainees per country (2 male, 2 female) on policies, regulations and</p>	<p>All countries have conducted the assessment of the impacts of common and traditional open burning practices in terms of releases of U-POPs, GHG emissions, and other contaminants, and the effects/benefits of BAT/BEP application.</p> <p>Technical Guidelines on Waste and Landfill Management Introducing BAT/BEP were developed in Cambodia and Lao PDR while the amendment of Law on Waste in Mongolia has been Approved and Ratified. For the Philippines, a resolution to fully enforce the provision on open burning of Municipal Solid Wastes including Agricultural Waste has been endorsed to the National Government. In Vietnam, a technical guidance for writing environmental protection scheme for four types of craft villages was developed and the National technical regulation on industrial waste incinerators was amended.</p> <p>Financing mechanisms and incentive systems have been developed, introduced and disseminated in Cambodia and Mongolia including its manual.</p>

		standards. Special consideration of gender.	Whereas, the collation and study on the current economic instruments for environmental and waste management are on-going for Philippines and Vietnam respectively. An Integrated Solid Waste Management Toolkit to Implement BAT and BEP in Open Burning was developed and completed through a Regional Trainers Training and currently disseminated through National Trainings in each of the participating country.
Component 2 – Institutional Strengthening			
OUTCOME 2: ENHANCED INSTITUTIONAL CAPACITY TO CARRY OUT BAT/BEP IMPLEMENTATION			
Output 2.1: Strengthened human resources/institutions on regional/national levels on waste management and BAT/BEP implementation in open burning of biomass and wastes, considering gender and social inclusiveness.	<p>Availability of a platform for regional collaboration.</p> <p>Number of trainees (male/female) on landfill management</p> <p>Number of trainees (male/female) on financing mechanisms and incentive systems</p> <p>Application of a standardized methodology for site inventory.</p>	<p>Introduction of a web-based platform for regional cooperation on academic and professional levels.</p> <p>At least 20 trainees on BAT/BEP and landfill management.</p> <p>At least 10 trainees on financing mechanisms and incentive systems</p> <p>Standardized methodology for site inventory adopted. National inventories on type and number of disposal sites updated</p>	<p>The project has a Regional Project Website that serves as platform of sharing experiences, best practices, publication and updates among participating countries. It aids learning and cooperation among countries that ensures smooth implementation of project activities. (http://www.stopopenburning.org)</p> <p>Two countries, Mongolia and the Philippines have already conducted their National Trainings on BAT/BEP in Open Burning and waste management. These trainings were based on the Regional Training of Trainers attended by 2 to 3 representatives from each of the participating country.</p> <p>Workshops/Trainings on Financing Mechanisms and Incentive Systems in support of BAT/BEP implementation were already completed in 3 countries, Cambodia, Laos and Mongolia.</p> <p>The Assessment of the impacts of common and traditional open burning practices in terms of releases of U-POPs, GHG emissions and other contaminants, and the effects/benefits of BAT/BEP application was already completed in all of the countries.</p>
Output 2.2: Enhanced regional/national institutional capacity through the	Adoption of standardized methodologies for U-POPs release inventory.	Standardized methodologies adopted for the continuous update of	Regional Training of Trainers (TOT) on POPs Analysis and Sampling was completed having two representatives from national

implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.	Number of laboratories and technicians/researcher (male female) in the region trained in conducting monitoring and analyses of U-POPs.	<p>U-POPs release inventory.</p> <p>Capacity of at least 3 main laboratories in the region strengthened to enable U-POPs analyses/monitoring.</p> <p>2-3 technicians trained for U-POPs analyses/monitoring in at least 3 laboratories. At least 1 researcher per country trained in evaluating and reporting on UP-POPs data</p> <p>At least 1 institution identified in the region to carry out trainings on U-POPs monitoring.</p>	<p>laboratories in each participating country. They were capacitated in monitoring, evaluating and reporting on U-POPs, GHG emissions and other contaminants released by open burning.</p> <p>The training was conducted by the Dioxin lab, Centre of Environmental Monitoring in Hanoi, Vietnam.</p> <p>Unintentionally produced POPs (U-POPs) inventory have been done in 2006 and updated in 2015 in Cambodia while 2013 in Mongolia.</p>
---	--	---	--

Component 3 – Demonstration activities on Pilot sites

Outcome 3: BAT/BEP IMPLEMENTED IN OPEN BURNING SOURCES

Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.	<p>Quantity of U-POPs and other relevant contaminants reduced at the demonstration sites.</p> <p>Quantity of CO₂ emissions reduced.</p>	<p>At least 5 sampling campaigns on each of the demonstration sites on ambient air, soil and leachate collected and analyzed for U-POPs and related contaminants at each demonstration site aimed to assess the effects of current practices.</p> <p>At least 20% CO₂ reduction achieved from the demonstration activities.</p>	<p>TOR to Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites is currently being finalized.</p>
Output 3.2 BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country.	<p>Value of materials recycled.</p> <p>Number of new businesses set up.</p> <p>Number of jobs created.</p> <p>Amount of new investments</p>	<p>Integrated waste management plans developed for the selected sites. BAT/BEP interventions carried out at the selected sites.</p> <p>At least 90% U-POPs reduction achieved in the demonstration sites</p>	<p>Waste Management Plans are developed for the selected sites. There is an approved 2016 General Santos City Solid waste management plan in the Philippines for implementation in 5 years that include economic incentives and PPP mechanisms to discourage open burning, promote waste recycling, and consider climate change mitigation/adaptation measures. In Cambodia a business model for</p>

		<p>Increase of at least 30% of reused/recycled materials.</p> <p>At least 30% CO₂ reduction achieved as co-benefit of the BAT/BEP implementation</p> <p>At least one business created/upgraded in the recycling/collection of different waste streams in all participating countries</p> <p>At least one additional job created in the enterprises involved.</p>	<p>a sustainable supply chain for recyclable waste in Battambang, focusing on plastic and organic in partnership with GGGI is being established. Lao PDR on the other hand has drafted a ministerial regulation on pollution control and guideline for management of waste material.</p> <p>Mongolia, has already proposed an updating of its National Waste Management Implementation Action Plan while Ulaanbaatar City Waste Management Implementation Plan has been updated and approved by the City Council.</p>
		Enhancement of Composting Center of COMPED and Battambang Plastic Recycling Company, Cambodia	<p>A market study on recyclables was already completed in Phnom Penh Area in Cambodia.</p> <p>Piloting of waste segregation at source in three districts in Battambang Province will be undertaken while the Composting Center of COMPED shall also be enhanced. The Battambang Plastic Recycling Company will be provided with a plastic granulating line with 2-4T/day capacity.</p>
		Enhancement of Plastic Recycling in SAPLAST, Vientiane and promotion of 3Rs in Thakek District Khammouane Province, Laos PDR	The documents and installation of equipment in SAPLAST are already being prepared and the TOR for the promotion of 3Rs in Thakek is currently being finalized.
		Landfill Cell For Ash Disposal and Storage and Maintenance Facility for Containers of chemicals and ash (Tsagaan Davaa Disposal Site, Ulaanbatar City, Mongolia)	The design, drawing and cost estimation, bidding and awarding of contract were already completed until January 2019. Activities undertaken since include completion of detailed work plan, kick off meetings, site validation and clean up. To date, ground works, procurement of materials and construction of cell are on-going.
		Central Materials Recovery Facility in General Santos City, Philippines (40tpd - combined non-bio and	<p>The construction of a Central Materials Recovery Facility (CMRF) in General Santos City is already completed.</p> <p>The activities undertaken to</p>

		bio mtrls)	complete the intervention include bidding, evaluation, Awarding/Signing of Contract, site validation and evaluation, submission of Inception report, training of barangays and deputation of Enforcers and IEC, ground breaking, fabrication, installation and construction of the facility for 12 months and inauguration. To date, it is already operational hoping to reach its maximum capacity of 40T/day before the end of the project.
		Pilot facilities for plastic recycling in Phan Boi and Minh Khai Craft Villages, Vietnam	The intervention in Vietnam intends to provide services and equipment, including one new plastic production line 10tpd, one improved plastic line 2tpd and one recycling plastic discards line 2t/h. Activities undertaken include completion of inception report, surveys in Minh Khai and Phan Boi Villages. At present, a Feasibility Study is currently being conducted.

Component 4 - Education and Awareness Raising

Outcome 4- IMPROVED KNOWLEDGE AND UNDERSTANDING ON BAT/BEP AND ON RISKS CONNECTED WITH U-POPs, GHG EMISSIONS AND OTHER CONTAMINANTS RELEASED THROUGH OPEN BURNING

Output 4.1 Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders	Number of targeted awareness raising and dissemination workshops for public at large available.	Project website developed and promoted at the regional level	All national project websites of the participating countries were developed and established and were linked to the regional website. Most events and information materials were posted in each of the websites as well as the accomplishments of the project.
	Number of awareness raising campaigns/materials that include information on business opportunities and financing mechanisms in waste management sector. Number of training courses and number of trainees (male/ female) for public officials and authorities.	Materials produced in English and main local languages, including information on business opportunities and financing mechanisms in waste management sector. At least 2 targeted awareness raising campaigns implemented and delivered. At least 5 National training courses and one regional training program with 10 trainees on health and environmental topics of open burning practices	All major awareness raising events have been delivered consisting of photo and poster making contests (in all countries), two fun-runs (Phils); clean ups (Mongolia); National Youth Debate (Cam); running and cycling events (Vietnam); and 2 tree planting events (Lao). Three countries (Ph, Cam, Lao) have already delivered their IEC/Short videos while Mongolia already have the video documentary. The remaining countries are already polishing and finalizing their short and video documentaries. Materials and merchandise have been produced and distributed to various stakeholders as part of the campaign to Stop Open Burning. These materials include leaflets,

			posters, hats, shirts, pamphlets, brochures, booklets, eco & drawstring bags, umbrellas, mugs and hand fans.
Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels	<p>Number of training courses for local stakeholders and businesses.</p> <p>Number of universities involved in setting up dedicated courses.</p>	<p>At least 1 training course on open burning and integrated waste management opportunities delivered per country.</p> <p>At least 1 training course for interested stakeholders and businesses carried out per demonstration site.</p> <p>At least 1 university curricula on U-POPs and BAT/BEPs developed per country.</p>	<p>All countries have conducted trainings/workshops pertaining to Effects of POPs and Open Burning on environment and human health. These include alternative biomass utilization, recycling and reuse of waste and plastic waste management.</p> <p>Three countries (PH, VN, Lao) were already able to develop and introduce education curricula at university level focused on BAT/BEP in waste management. - two Universities in the Philippines and one in Vietnam. The courses were given to energy engineering and environmental students respectively.</p> <p>For Lao PDR, course syllabus, "Municipal Solid Waste and Organic Pollutant" was developed, adopted and now part of the teaching program in the department of Mechanical Engineering, National University. with 2 credits as part of a bachelor's degree.</p> <p>Cambodia and Mongolia are still finalizing their curricula though Mongolia at the same time is also developing and finalizing a textbook on "Solid Waste Management and Treatment Technologies on solid waste management and U-POPs" for university students.</p>
Component 5 – Monitoring and Evaluation			
OUTCOME 5: ESTABLISHED PROJECT MANAGEMENT STRUCTURE AND THE SYSTEM FOR MONITORING/EVALUATION OF PROJECT IMPACT			
Output 5.1: Project impact monitoring system identified and implemented.			<p>Regional Project Launch and Inception Workshop held on May, 2015</p> <p>Project Steering Committee Meetings (PSC):</p> <ul style="list-style-type: none"> -May 2015 in Cambodia, -December 2016 in Vienna -February 2018 Philippines -March 2019 in Vietnam <p>Technical Coordination Meetings (TCM):</p> <ul style="list-style-type: none"> -February 2016 Thailand -October 2017 Vienna -March 2019 Vietnam

			<p>Three PIRs accomplished and submitted every September of each year since 2016</p> <p>Mid Term evaluation Completed (November 2018)</p>
--	--	--	---

III. Project Risk Management

III.1 Please indicate the overall risk management: (i) as identified in the CEO Endorsement document, and (ii) progress to-date.

[Describe in tabular form the priority activities undertaken during the reporting period in line with the project document. **Note** that risks, risk level and mitigations measures should be consistent with the ones identified in the CEO Endorsement/Approval document.]

	(i) Risks	(i) Risk level	(i) Mitigation measures	(ii) Progress to-date	New defined risk ³
1	Delays in updating the legal framework and specific policy and technical guidance	Low risk (L)	All concerned stakeholders will be involved in the development of new/revised legislations.	No significant delay was encountered.	<input checked="" type="checkbox"/>
2	Market-focused measures for supporting BAT/BEP implementation will not be supported by private sector investments.	Modest risk (M)	Representatives of the industrial and banking sectors will be involved in developing the market-focused measures for green investment promotion.	Representatives of these sectors were invited during consultation workshops and partnerships with them are continued and explored.	<input checked="" type="checkbox"/>
3	The regional network for information exchange will not be maintained after project completion.	Low risk (L)	The regional information exchange will be built on the currently available governmental and international infrastructures of the ESEA BAT/BEP Forum.	All national websites that were developed are already linked to the official or government websites in each country. During the last PSC meeting, Philippines volunteered to host the regional website once the project is completed.	<input checked="" type="checkbox"/>
4	Training not fully relevant to the stakeholders	Low risk (L)	Training needs will be assessed and pre- and post-training analysis will be undertaken. Relevant institutions will be identified.	Trainings conducted under every component of the project were found to be significant by government partners and various stakeholders. All trainings in ISWM and the Training of Trainers had helped disseminate information on the ill effects of POPS and open burning thus also contributing to the realization of other project outcomes.	<input checked="" type="checkbox"/>

³ New risk added in reporting period. Check only if applicable.

5	Not all participating countries will have the necessary resources to maintain UP-POPs laboratory up to standard	Modest risk (M)	National laboratories with the necessary resources can serve as the main partner for other countries in ensuring that UP-POPs analysis can be undertaken	The Vietnam Dioxin Laboratory conducted the training to capacitate the National Laboratories and one trained personnel from the Philippines has already started utilizing the methodology that they have learned in such training	<input checked="" type="checkbox"/>
6	Preliminary monitoring campaigns may not be representative	Low risk (L)	Assessment and monitoring campaign will be carried out by national and international experts to assure reliable data	It is the intention that the assessment and monitoring campaign be carried out by national and international experts to assure reliable data.	<input checked="" type="checkbox"/>
7	BAT/BEP measures and waste management plans in large landfills will not achieve the assumed positive results and thus will not be cost efficient within the project time	Low risk (L)	To address costs and time constraints, the project will focus on already existing landfills and on specific portion of them, in order to demonstrate cost/effective BAT/BEP implementation and technology transfers.	The implementation of the interventions were made after knowing available data, situation in the project sites, existing projects and/or conducted studies and missions in project sites to avoid duplication as well as to be able to build on what they already have.	<input checked="" type="checkbox"/>
8	The expected release reduction targets will not be achieved.	Modest risk (M)	The release reduction targets will consider ongoing programs at the national level in order to set realistic and achievable targets for the participating countries.	Dioxin Lab of Vietnam has been endorsed by the PSC to undertake sampling and analysis of relevant emissions in the pilot sites.	<input checked="" type="checkbox"/>
9	Low participation and interest from the stakeholders and general public.	Low risk (L)	Dedicated workshops will address broader issues than UP-POPs, such as waste management and agricultural activities..	The national activities such as workshops, trainings, IECs were well attended by various stakeholders.	<input checked="" type="checkbox"/>
10	Education programs not fully implemented due to lack of interest of relevant institutions	Low risk (L)	Partnership with relevant institutions will be timely established.	Modules and syllabi were already implemented in the universities up to the point of adopting and making it part of the teaching program in the university.	<input checked="" type="checkbox"/>
11	Climate change risk: Natural disasters	Low risk (L)	The feasibility study prior to the construction of	Historical records and plans were reviewed and validation missions conducted prior to site selection and construction of project	<input checked="" type="checkbox"/>

may result to destruction of the measures/ interventions applied to the demonstration sites.		project facilities should consider the historical flood records and changes in the weather in the demonstration sites.	facilities.	
--	--	--	-------------	--

III.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.

N/A

IV Environmental and Social Safeguards (ESS) & Stakeholder Engagement

IV.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

	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

☐ Category C project

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

IV.2 Please provide any feedback submitted by co-financiers, and other Partners/Stakeholders of the project (e.g. private sector, CSOs, NGOs, etc.).

All co-financiers (including newly-identified ones) are committed to the provision of the

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

5082_1_4th PSC Aide Memoire
5082_2 PSC Minutes of the Meeting with Annexes
5082_3_MTE Report ESEA BATs and BEPs in Open Burning
5082_4_Financial Mechanism Report Cambodia
5082_5_nacing Mechanism and Incentive System Mongolia

V Knowledge Management

V.1 Please provide any **relevant knowledge management mechanisms / tools** that the project has generated:

5082_Cambodia IEC Video “Clean Village, No Plastic, No Waste”
<https://www.facebook.com/314699302002531/videos/314340019360934/>

5082_LAO PDR IEC Video Stop Open Burning
<https://youtu.be/MTWK1gm86yc>

5082_Philippines IEC Video Stop Open Burning
<https://youtu.be/l623nrLfqJ0> - Open Burning IEC English Subtitles
<https://youtu.be/gCws0yCXUHQ> - Open Burning IEC Filipino Subtitles

5082_Mongolia IEC Video Stop Open Burning
https://youtu.be/2cycD_TVrvI
<https://www.youtube.com/watch?v=1LXAYka788k>

VI Financial report

VI.1 **Financial** implementation of the project:

The current financial status shows that the main expenditure as of 30 June 2019 is in Component 3. This is expected since this expense pertains to the major interventions to be situated in each of the participating country. Except for Project Management, all expenditures are still within the total agreement budget.



PROJECT DELIVERY REPORT

Project:	150033 - US/MUNIS MAJLION OF BAT AND BEP IN OPEN BURNING ACTIVITIES IN RESPONSE TO THE STOCKHOLM CONVENTION ON POPs			Project Manager:	Carmela Centeno	Project Validity:	Status:	01.04.2015 - 30.04.2022	Implement
Project Theme:	Energy and Environment			Country:	RegAsia-Pacific	Region		Asia and Pacific	
Grant	Grant Description			Fund	Currency	Grant Status		Grant Validity	
2000003040	2015_IMP: BAT/BEP: E			GF	USD	Authority to implement		31.03.2015 - 30.04.2021	

	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)
2000003040											
150033-1-01-01	BAT/BEP in Legislative Framework	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	0.00	0.00	0.00	0.00	135,302.96	135,302.96	26,507.74	108,795.22	0.00	26,507.74
1500	Local travel	0.00	0.00	0.00	0.00	70,000.00	70,000.00	0.00	70,000.00	0.00	0.00
1700	Nat.Consult./Staff	24.45	(2,445.00)	2,469.45	24.45	142,590.14	142,590.14	141,567.64	1,022.50	0.00	141,567.64
2100	Contractual Services	3,291.53	0.00	0.00	0.00	55,526.42	55,526.42	52,234.89	3,291.53	0.00	52,234.89
3000	Train/Fellowship/Study	10,015.90	0.00	0.00	0.00	31,492.50	31,492.50	1,476.60	30,015.90	0.00	1,476.60
3500	International Meetings	0.00	0.00	0.00	0.00	25,496.01	25,496.01	496.01	25,000.00	0.00	496.01
4300	Premises	686.70	0.00	0.00	0.00	2,961.60	2,961.60	2,274.90	686.70	0.00	2,274.90
4500	Equipment	349.68	0.00	0.00	0.00	2,968.12	2,968.12	2,648.44	349.68	0.00	2,648.44
5100	Other Direct Costs	1,603.83	1,275.84	360.09	1,635.93	7,621.90	7,621.90	7,654.00	(32.10)	0.00	7,654.00
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22,311.81	22,311.81
150033-1-01-01	Total	15,972.09	(1,169.16)	2,829.54	1,660.38	473,989.65	473,989.65	234,860.22	239,129.43	22,311.81	257,172.03
150033-1-01-02	Enhanced Institutional Capacity	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	0.00	0.00	0.00	0.00	48,000.00	48,000.00	14,292.00	33,708.00	0.00	14,292.00
1500	Local travel	5,999.99	0.00	5,900.00	5,900.00	124,999.90	124,999.90	33,036.95	91,962.95	0.00	33,036.95
1700	Nat.Consult./Staff	0.00	0.00	0.00	0.00	82,162.80	82,162.80	51,455.09	30,707.71	0.00	51,455.09
2100	Contractual Services	59,181.51	0.00	0.00	0.00	260,000.00	260,000.00	150,818.49	109,181.51	0.00	150,818.49
3000	Train/Fellowship/Study	23,879.17	0.00	1,082.72	1,082.72	32,573.83	32,573.83	9,777.38	22,796.45	0.00	9,777.38
3500	International Meetings	1,591.48	(1,736.31)	6,429.08	4,692.77	101,359.41	101,359.41	101,460.70	(101.29)	0.00	101,460.70
4500	Equipment	616.72	0.00	0.00	0.00	1,233.44	1,233.44	616.72	616.72	0.00	616.72
5100	Other Direct Costs	315.89	0.00	65.82	65.82	41,839.20	41,839.20	3,589.13	38,250.07	0.00	3,589.13
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34,679.54	34,679.54
150033-1-01-02	Total	94,484.76	(1,736.31)	13,477.62	11,741.31	692,168.58	692,168.58	365,046.46	327,122.12	34,679.54	399,726.00
150033-1-01-03	BAT/BEP Gradually Implemented	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	59,317.05	(8,169.62)	21,426.43	13,256.81	165,263.88	165,263.88	119,203.64	46,060.24	0.00	119,203.64
1500	Local travel	28,382.26	0.00	5,228.02	5,228.02	118,455.40	118,455.40	65,321.16	53,134.24	0.00	65,321.16
1700	Nat.Consult./Staff	41,373.26	492.90	2,480.88	2,973.78	262,800.00	262,800.00	24,400.52	238,399.48	0.00	24,400.52
2100	Contractual Services	1,523,319.49	1,202,839.22	125,075.56	1,327,914.78	3,671,416.96	3,671,416.96	2,517,595.29	1,153,821.67	0.00	2,517,595.29
3000	Train/Fellowship/Study	1,265.00	0.00	1,265.00	1,265.00	1,265.00	1,265.00	1,265.00	0.00	0.00	1,265.00
3500	International Meetings	8,856.30	0.00	0.00	0.00	20,998.58	20,998.58	12,142.28	8,856.30	0.00	12,142.28
4500	Equipment	541,700.00	520,700.00	0.00	520,700.00	544,601.67	544,601.67	523,601.67	21,000.00	0.00	523,601.67
5100	Other Direct Costs	9,651.97	0.00	(16.74)	(16.74)	20,319.81	20,319.81	651.10	19,668.71	0.00	651.10
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	310,097.26	310,097.26
150033-1-01-03	Total	2,213,845.33	1,715,862.50	155,459.15	1,871,321.65	4,805,121.30	4,805,121.30	3,264,180.66	1,540,940.64	310,097.26	3,574,277.92
150033-1-01-04	Education and Awareness	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	0.00	0.00	0.00	0.00	60,000.00	60,000.00	0.00	60,000.00	0.00	0.00
1500	Local travel	59.44	0.00	0.00	0.00	15,853.94	15,853.94	15,794.50	59.44	0.00	15,794.50
2100	Contractual Services	24,604.41	(118,759.18)	118,758.00	(1.18)	812,521.99	812,521.99	747,916.40	64,605.59	0.00	747,916.40
3000	Train/Fellowship/Study	27,644.82	885.58	16,478.15	17,363.73	48,242.58	48,242.58	17,363.73	25,959.09	0.00	17,363.73
3500	International Meetings	0.00	0.00	0.00	0.00	40,357.30	40,357.30	40,357.30	0.00	0.00	40,357.30
4500	Equipment	802.27	2,643.39	2,314.08	4,957.47	1,643.22	1,643.22	5,798.42	(4,155.20)	0.00	5,798.42
5100	Other Direct Costs	385.59	2,700.00	0.00	2,700.00	8,014.87	8,014.87	10,329.28	(2,314.41)	0.00	10,329.28
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	79,568.37	79,568.37
150033-1-01-04	Total	53,796.53	(112,530.21)	137,550.23	25,020.82	986,633.90	986,633.90	837,559.63	144,154.51	79,568.37	917,128.00

	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)
150033-1-51-01	Project Management	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	319.44	0.00	0.00	0.00	638.88	638.88	319.44	319.44	0.00	319.44
1500	Local travel	10,000.00	0.00	3,555.52	3,555.52	10,000.00	10,000.00	3,555.52	6,444.48	0.00	3,555.52
1700	Nat.Consult./Staff	48,433.45	23,002.08	24,807.04	48,709.12	337,739.44	337,739.44	338,015.11	(275.67)	0.00	338,015.11
2100	Contractual Services	0.00	0.00	0.00	0.00	134.48	134.48	134.48	0.00	0.00	134.48
3000	Train/Fellowship/Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3500	International Meetings	2,147.17	0.00	0.00	0.00	18,827.49	18,827.49	16,680.32	2,147.17	0.00	16,680.32
4300	Premises	627.10	(17.58)	563.09	545.51	1,254.20	1,254.20	1,172.61	81.59	0.00	1,172.61
4500	Equipment	0.00	0.00	0.00	0.00	7,757.27	7,757.27	7,757.27	0.00	0.00	7,757.27
5100	Other Direct Costs	6,609.52	(687.04)	662.44	(25.50)	8,294.83	8,294.83	1,659.81	6,635.02	0.00	1,659.81
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35,082.36	35,082.36
150033-1-51-01	Total	68,136.68	23,196.56	29,588.09	52,784.65	384,646.59	384,646.59	369,294.56	15,352.03	35,082.36	404,376.92
150033-1-53-01	Evaluation and Monitoring	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	36,978.97	0.00	0.00	0.00	55,000.00	55,000.00	18,023.03	36,978.97	0.00	18,023.03
1500	Local travel	0.00	0.00	0.00	0.00	350.65	350.65	350.65	0.00	0.00	350.65
1700	Nat.Consult./Staff	60,031.05	29,384.48	30,859.59	60,244.07	154,391.33	154,391.33	140,947.39	13,443.94	0.00	140,947.39
3500	International Meetings	0.00	0.00	0.00	0.00	5,932.80	5,932.80	5,932.80	0.00	0.00	5,932.80
5100	Other Direct Costs	882.60	0.00	52.84	52.84	1,765.20	1,765.20	935.44	829.76	0.00	935.44
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15,787.62	15,787.62
150033-1-53-01	Total	97,890.62	29,384.48	30,912.43	60,296.91	217,439.98	217,439.98	166,189.31	51,250.67	15,787.62	181,976.93
2000003040	Total	2,544,126.01	1,653,007.86	369,817.06	2,022,824.92	7,560,000.00	7,560,000.00	5,237,130.84	2,317,949.40	497,526.96	5,734,657.80
150033	USD Total	2,544,126.01	1,653,007.86	369,817.06	2,022,824.92	7,560,000.00	7,560,000.00	5,237,130.84	2,317,949.40	497,526.96	5,734,657.80

VII Work Plan and Budget

VII.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	2019-2020				2020-2021				Year 3				GEF Grant Budget Available (US\$)	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q1	Q2	Q3	Q4		
Component 1 – Legislation Improvement														
Outcome 1: STRENGTHENED LEGISLATIVE CAPACITY FOR INTRODUCING BAT/BEP IN WASTE OPEN BURNING SECTOR														
Output 1.1: Updated legal and regulatory frameworks for open burning to facilitate waste management improvements and BAT/BEP and to enable introduction of financing mechanisms	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	239,129.43	
Component 2 – Institutional Strengthening														
OUTCOME 2: ENHANCED INSTITUTIONAL CAPACITY TO CARRY OUT BAT/BEP IMPLEMENTATION														
Output 2.1: Strengthened human resources/ institutions on regional/ national levels on waste management and BAT/BEP implementation in open burning of biomass and wastes.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	96,844.596	
Output 2.2: Enhanced	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	225,970.724	

regional/national institutional capacity through the implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.													
Component 3 – Demonstration Activities In Pilot Sites													
Outcome 3: BAT/BEP IMPLEMENTED IN OPEN BURNING SOURCES													
Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	126,897.054
Output 3.2: BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country Output 3.2: BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	507,588.216
3.2.1 Set up waste management plans with economic incentives and PPP mechanisms to discourage open burning, promote waste recycling, and consider climate change mitigation/adaptation measures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.2 Enhance effectiveness of waste collection and segregation, introduce BAT/BEP at the selected dumpsite in Cambodia and promote waste recycling activities. Consider climate change adaptation needs of the site.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.3 Enhance effectiveness of waste selection and segregation, promote waste recycling activities and investigate climate change mitigation/adaptation measures at the selected landfill in Lao PDR	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.4 Set up the system for reuse of metal drums to collect ashes, and introduce BAT/BEP at the selected dumpsite in Mongolia considering climate change	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

mitigation/adaptation													
3.2.5 Set up integrated waste management systems including waste recycling, composting facilities and landfill gas utilization plants at selected municipalities and sites in Philippines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.6 Set up a centralized system for collection/reuse of scrap metals, and a system for agricultural residues utilization; develop financial schemes to incentivize full inclusion of local resources in craft villages in Vietnam	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.7 Carry out monitoring of U-POPs, GHG emissions and other relevant contaminants on the demonstration sites after the implementation of BAT/BEP, and disseminate the results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2.8 Evaluate environmental, socio-economic and other co-benefits of implemented measures/activities on all sites, on the basis of the formulated impact indicators. Disseminate the relevant results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Component 4 Education and Awareness Raising													
Outcome 4 IMPROVED KNOWLEDGE AND UNDERSTANDING ON BAT/BEP AND ON RISKS CONNECTED WITH U-POPs, GHG EMISSIONS AND OTHER CONTAMINANTS RELEASED THROUGH OPEN BURNING													
Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	71,959.485
Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	71,959.485
Component 5 – Monitoring and Evaluation													
Outcome 5 - ESTABLISHED PROJECT MANAGEMENT STRUCTURE AND THE SYSTEM FOR MONITORING/EVALUATION OF PROJECT IMPACT													
Output 5.1: M&E framework	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14,367.97

of the project established													
Output 5.2: Project Impact Monitoring System Identified and Implemented	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	51,036.39

VIII Synergies

VIII.1 **Synergies** achieved: