



## **4<sup>th</sup> PROJECT STEERING COMMITTEE MEETING REPORT**

**Regional East and South East Asia Project on**

**Demonstration of Best Available Techniques (BATs) and Best Environmental Practices (BEPs) in Open Burning Activities in Response to Stockholm Convention on PoPs**

14 – 16 March 2019

Hanoi, Vietnam

## Contents

- I. Introduction and Meeting Objectives
- II. Participants
- III. PSC Meeting
  - A. Approval of the Minutes and Regional Updates
  - B. Country Updates
- IV. Regional Plans/Activities
- V. Presentation of the SWEEP – ENMOS Project in the Philippines
- VI. Presentation of the MTE Initial Results
- VII. Other Issues Discussed During the TCM
- VIII. Agreements

## Annexes

- |          |                               |
|----------|-------------------------------|
| Annex A  | --Agenda and Programme        |
| Annex B  | – Attendance Sheets           |
| Annex C  | – Philippine Workplan 2019    |
| Annex C1 | -- Philippine Activity Matrix |
| Annex D  | – Mongolia Workplan 2019      |
| Annex D1 | -- Mongolia Activity Matrix   |
| Annex E  | – Cambodia Workplan 2019      |
| Annex E1 | -- Cambodia Activity Matrix   |
| Annex F  | – Laos Workplan 2019          |
| Annex F1 | --Laos Activity Matrix        |
| Annex G  | – Vietnam Workplan 2019       |
| Annex G1 | -- Vietnam Activity Matrix    |

## I. INTRODUCTION AND MEETING OBJECTIVES

The regional project “Demonstration of BAT and BEP in Open Burning Sector in Response to the Stockholm Convention on POPs” had its **4th Project Steering Committee (PSC) and Technical Coordinators Meeting (TCM) on 14 – 16 March 2019 at Adonis Hotel in Hanoi, Vietnam.**

The objective of the **4th PSC Meeting** is to present project accomplishments and updates for each component as well as to present the work-plan for 2019 of each country. Initial results of the Midterm Evaluation conducted in November 2018 were also presented.

It was attended by UNIDO, Project participating countries (Project Director and/or Project Coordinator, the Participating Country Project Managers, GEF Focal. The UNIDO Country Representative from Vietnam was also present to grace the event.

Most of the discussions during the meeting pertained to the remaining activities and statuses of project implementation specifically those activities in Component 3. The initial results of the Mid-Term Evaluation were also presented and discussed during the meeting. The SWEET-ENMOS Program of the Philippines was also shared to the members of the group to show how it was implemented.

The Regional Manager also presented the budget status and the remaining regional activities that are still to be undertaken.

Important decisions were arrived at during the meeting, which are the following: (a) To request to GEF for a one (1) year extension of the project; (b) To engage the Dioxin Laboratory of Vietnam to implement the activities in monitoring (activity 3.1.2); (c) Reproduction of toolkits (in local language) and some IEC information materials for all the participating countries.

Another important issue discussed was about the regional collaboration and how this could be highlighted in the reporting to show its advantages and actual benefits. The plan to have the regional conference to take place before the project ends and that the next PSC Meeting shall be held in Mongolia either April or July in 2020.

The NPMs had a more detailed discussion on Component 3 of each country and other issues concerning project implementation. A reception and a site visit were also conducted during the three-day activity.

## II. PARTICIPANTS

All of the Project Management Units (PMUs) from each country were present together with the representatives from GEF and PMU Director/Coordinator.

Following are the attendees of the meeting:

- |                             |  |
|-----------------------------|--|
| 1. Dr. Carmela Centeno      | Regional Project Manager, UNIDO  |
| 2. Ms. Suman Lederer        | UNIDO MTR Expert   |
| 3. H.E. Heng Nareth         | National Project Coordinator, Cambodia                                 |
| 4. Mr. Phet Pichhara        | National Project Manager, Cambodia                                     |
| 5. Mr. Taing Meng Eang      | Director, Department of Green Economy, Cambodia                        |
| 6. Mr. Khamhou Tounnalnom   | National Project Coordinator, Laos                                     |
| 7. Mr. Virasack Chundara    | National Project Manager, Laos   |
| 8. Mr. Batzaya Nogoya       | Chief, Cadastre on Forest, Water and Protected Area Division, Mongolia |
| 9. Mr. Delgerbayar Badam    | National Project Manager, Mongolia                                     |
| 10. Ms. Vizminda Osorio     | Assistant. Director, Environmental Management Bureau, Philippines      |
| 11. Ms. Lourdes Wagan       | Director, Foreign Assisted and Special Projects Services, Philippines  |
| 12. Ms. Haidee Penero       | National Project Manager, Philippines                                  |
| 13. Mr. Le Hoai Nam         | National Project Director, Vietnam                                     |
| 14. Ms. Dang Thuy Linh      | National Project Coordinator, Vietnam                                  |
| 15. Ms. Hoang Thi Dieu Linh | National Project Manager, Vietnam                                      |
| 16. Ms. Le Thi Nam Phuong   | GEF Office, Vietnam  |

#### Other Guests

- |                            |  |
|----------------------------|--|
| 1. Ms. Le Thi Thanh Thao   | UNIDO Country Representative, Vietnam                |
| 2. Ms. Tran Tuyet Van      | UNIDO Country Office, Vietnam                        |
| 3. Mr. Dinh Viet Cuong     | Department of Waste Management, Vietnam              |
| 4. Ms. Juvinia Serafin     | Expert, Solid Waste Management EMB-DENR, Philippines |
| 5. Ms. Nguyen Thi Cam Uyen | PMU Member, Vietnam                                  |

Signed attendance sheets are attached as Annex A.

### III. PSC Meeting

Dr. Carmela Centeno, the Regional Project Manager (RPM), briefly welcome everyone and Mr. Le Hoai Nam, National Project Director of Vietnam gave the opening remarks and chaired the PSC Meeting. He mentioned the project components as well as the planned intervention in the two craft villages in Vietnam and that he highly supported the project and the hosting of the 4th PSC. He also wished everyone to have a fruitful meeting as well as to have an enjoyable experience in Vietnam.

A short message was then given by the UNIDO Country Representative (UCR) of Vietnam, Ms. Le Thi Thanh Thao. She also mentioned the PSC meeting objectives and briefly discussed the importance of the stakeholder involvement and the commitment of all government offices from the national to the local offices and the private sector for the success of the project. She emphasized on the open burning from dumpsites as a major contributor of UPOPs emission in Vietnam.

Dr. Centeno then asked everyone to briefly introduced himself or herself and she also mentioned the reason for the presence of Ms. Serafin from the Philippines. After all of the greetings, warm messages and a group photo, the group proceeded to the meeting proper starting with the review and approval of the 3<sup>rd</sup> PSC Minutes of meeting.

The Program for the 4th PSC is attached as Annex A1.

### **III. A. Approval of the Minutes of the Meeting and Regional Updates**

The Regional Coordinator presented the minutes of the meeting and the agreements arrived at during the 3<sup>rd</sup> PSC meeting in the Philippines 2018 as well as the updates/progress in each item. Almost all of the agreements were fulfilled and accomplished though some were still on-going. The highlights of the presentation as follows:

1. Development of the awareness raising materials which include 3 types as indicated in the TOR – most of the countries have completed this activity though mostly lacking are the versions of such in English.
2. Education Curricula and Cooperation Agreements – Most of the countries already have their Education Curricula implemented. Though lacking mostly were the proof of accomplishments such as proof of enrolments, exam results and the like.
3. Cooperation Agreements or Memorandum of Understanding/Agreement are also available in most of the countries. These agreements are for Component 4 – Agreements between University/Institution for the implementation of the Curricula and for Component 3 – specifically for the implementation of the intervention stipulating the roles of each partner.
4. Act 215, the international expert Dr. Andrea Sbrilli has completed the data excel sheet regarding the landfill sites.
5. Act 311 and Act. 312 were pending prior to implementation of all project sites but currently in the development of the TOR by a UNIDO expert.
6. The posting of all other information materials such as project brochures, posters etc. Were also accomplished though countries were still encouraged to submit regularly for posting.
7. The ToT on Solid Waste Management Toolkit was already conducted but most of the national trainings have yet to be conducted by other countries.
8. The Midterm evaluation was also carried out in November 2018 and the evaluator has already prepared and submitted the initial draft for comments.
9. Most of the countries have submitted their co-financing statements except for one.
10. The website links were already provided and included in the last PIR.

After the presentation of the minutes of the 3<sup>rd</sup> PSC Meeting, the Regional Project Manager moved for the adoption of the minutes and the National Project Manager of Mongolia seconded it.

#### **Other Discussions:**

After the adoption of the minutes, the RPM expressed her interest for the project to come up with a

regional video documentary covering all 5 countries using the 15-minute videos produced by each of the country.

Also, the maintenance and hosting of the national website was then clarified that after the project or once the contract is already consumed, the national website will then be turned over to the project government partner.

Activity 3.2.1 pertaining to SWM plan was also clarified as a national activity and that most of the countries already have the document referring to plans and studies prepared for their specific interventions.

The Regional Technical Coordinator (RTC) presented the status of regional activities, which are as follows:

ACTIVITY	DESCRIPTION/UPDATES
Activity 1.1.1.	The final report for the Regional Assessment of the impacts of common and traditional open burning practices was completed and submitted to UNIDO by Dr. Andrea Sbrili.
Activity 1.1.2.	There is a target Regional Workshop for the sharing of experiences which shall be scheduled prior to the closing or end of the project.
Activity 1.1.5.	The toolkit has been approved and implemented during the ToT on March 2018
Activity 2.1.1.	The regional website is maintained and continuously being updated but countries are still encouraged to submit articles for posting. The hosting and maintenance of the website shall be until the end of project.
Activity 2.1.2 & 2.1.3	The Regional Training has been conducted and completed. National Trainings in some countries are still to be conducted.
Activity 2.2.1 & 2.2.2	Regional Training for National Laboratories conducted and completed in Vietnam.
Activity 3.1.2	TOR development.
Activity 3.2.7 & 3.2.8.	To carry out monitoring of UPOPs after completion of demonstration facility /intervention disseminate relevant results after implementation of BAT & BEP and dissemination of relevant results and evaluate socio-economic and co-benefits of the intervention.

### **III.B. Country Reports / Updates**

After the approval of the minutes and the regional updates, all countries presented their project implementation statuses and other issues. Following are the updates per component presented by each of the National Project Managers:

#### ***III B.1 PHILIPPINES***

Almost all national project activities in the Philippines were already undertaken except for some major activities in Component 1 and another one in Component 2 and 4.

##### ***B.1 Outcome 1: Strengthened legislative capacity for introducing BAT/BEP in waste open burning source category.***

The activity that needs to be delivered for Component 1 is Activity 1.1.2 that is the issuance of a National Solid Waste Management Commission Resolution and/or a Memorandum Circular for the clarification of the law on Open Burning. Prior to its issuance, consultation with experts, presentation to the Commission and deliberation are still to be undertaken.

Other Activities that are still for accomplishment under this Component are Activities 1.1.3, 1.1.4 and 1.1.6. Which pertain to the collation of existing and recommended BATs and BEPs to stop open burning in the Philippines, the conduct of the training workshop and manual development. All these are expected to be accomplished by April to early May of 2019.

##### ***B.1 Outcome 2: Enhanced institutional capacity to carry out BAT/BEP implementation.***

Activity 2.1.4 which is the training on application of the financing mechanism is also expected to be delivered back to back with the activities in Component 1.

##### ***B.1 Outcome 3: BAT/BEP implemented in open burning sources.***

All activities have been completed except for some regional activities. Philippines was the first among the five countries to complete the intervention in Component 3. The video during the inauguration of the Central Materials Recovery Facility in General Santos City, Philippines was presented during the meeting. It was requested by H.E. Heng Nareth to share some details on the brick making and other details of the facility. The NPM shall then send the said information to all National Project Managers.

##### ***B.1 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.***

The only remaining activities for this component is the finalization of the video documentary as well as the signing of the Cooperation Agreements between the National Government and the Universities.

Attached as Annex C is the Workplan of Philippines for 2019 and Annex C1 is the Philippine Activity Matrix.

### **III B.2 MONGOLIA**

The NPM of Mongolia reported that almost all of the major national project activities in Mongolia have been accomplished except for Component 3 which is on-going and some minor activities in Components 1,2 and 4.

#### **B.2 Outcome 1: Strengthened legislative capacity for introducing BAT/BEP in waste open burning source category.**

The only remaining activity under this component is related to Activity 1.1.5 which is the conduct of a national training using the toolkit that was developed. This has to be translated first into Mongolian language and the training shall be implemented together with Activity 2.1.3

#### **B.2 Outcome 2: Enhanced institutional capacity to carry out BAT/BEP implementation.**

Training for local technical staffs on disposal sites is targeted after construction completion of landfill site for ash disposal.

#### **B.2 Outcome 3: BAT/BEP implemented in open burning sources.**

Activities 3.2.1 and 3.2.4 are on-going though there were already major activities that have been successfully undertaken which include (1) The design drawing and cost estimates for the construction of landfill cell for ash disposal and a storage facility; (2) Terms Of Reference For The Construction Of Landfill Cell For Ash Disposal and A Storage and Maintenance Facility For Containers For Chemicals And Ash At Tsagaan Davaa Site In Ulaanbaatar City; (3) RFP, Bidding, Technical Evaluation and Contract Signing of the Construction work for the Landfill cell for ash disposal and storage and maintenance facility; (4) Submission of detailed work plan and conduct of kick off meetings with stakeholders. The construction have started in March 2019 and expected to be completed after 10 months.

#### **B.2 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.**

The remaining activity for Component 4 pertains to the education curricula. A draft of textbook on solid waste management and U-POPs for university students was already developed. This will be used as guidance materials and education curricula at university level.

Cooperation Agreement between Technical University Shine Mongol and the Partner Government has been signed for the development of the curricula. It is foreseen that everything for component 4 will be accomplished within year 2019.

Dr. Centeno again commended the NPM of Mongolia for a very comprehensive report and countries were again reminded to include the male – female rations in reporting their activities just like what was presented by D. Badam.

Attached as Annex D is the Workplan of Mongolia for 2019 and Annex D1 is the Mongolia Activity Matrix.

### ***III.B.3 CAMBODIA***

#### ***B.3. Outcome 1: Strengthened legislative capacity for introducing BAT/BEP in waste open burning source category.***

The only remaining activity under this component is related to Activity 1.1.5 which is the conduct of a national training using the toolkit that was developed. This has to be translated first into Cambodian language.

#### ***B.3 Outcome 2: Enhanced institutional capacity to carry out BAT/BEP implementation.***

All activities for this component had already been conducted.

#### ***B.3 Outcome 3: BAT/BEP implemented in open burning sources.***

There was a change in the demonstration site from Phnom Penh area to Battambang Province, it was noted though that a survey on recyclable materials in Phnom Penh has already been undertaken. Despite the two initial options laid out to be undertaken in Phnom Penh, no option was chosen but instead decided not to proceed with Phnom Penh as project site.

Battambang Province was then chosen as the demo site for Cambodia. Proposed interventions include; (1) Improving composting (COMPED) and (2) plastic recycling activity (Battambang Plastic Products Private Company). Business and work plan for the equipment supply for COMPED has been completed and the co-financing letter was already received from Battambang Province. Two districts were chosen as pilot sites for the segregation at source.

The survey and the assessment conducted in the sites, including the one conducted by GGGI would be an appropriate output for Activity 3.2.1.

Activities that are currently being undertaken include: (1) bidding and selection of the contractor for the supply of new equipment (shredder, revolving, screening machines) for the composting facility; (2) exploring the possibility if COMPED could be appointed to be the issuing body for a local bid for the supply and installation of concrete basements and roofing; (3) provision of plastic granulating line 2-4T/day capacity and depending on the availability of funds, other equipment such as blower could also be provided.

The Cooperation Agreements were already drafted and for review of COMPED and Battambang Municipality. In support to the activities in the new site, an awareness raising campaign has already been started By DEE and a big event is planned on March 2019.

**B.3 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.**

It was reported that all of the activities for Component 4 had been accomplished in Cambodia except for the finalization of the curriculum on BAT/BEP in waste management and incentive/financing system.

The NPM also cited activities under this component where the budget of the Ministry of Environment of Cambodia was utilized.

Other Countries were also encouraged to take note/report the activities undertaken or will be undertaken when the resources of the Government partner was used.

Attached as Annex E is the Workplan of Cambodia for 2019 and Annex E1 is the Cambodia Activity Matrix.

### **III B.4 LAOS**

**B.4 Outcome 1: Strengthened legislative capacity for introducing BAT/BEP in waste open burning source category.**

The NPM reported that the only remaining activity under this component is related to Activity 1.1.5 which is the conduct of a national training using the toolkit that was developed. At first, it was mentioned that they already conducted an IEC Campaign in Thakek Province but it was reiterated and confirmed later on that this could not be considered as a replacement for the said training.

**B.4 Outcome 2: Enhanced institutional capacity to carry out BAT/BEP implementation.**

All activities for this component have already been conducted.

**B.4 Outcome 3: BAT/BEP implemented in open burning sources.**

For component 3, the NPM reported some activities that were already conducted that are related to the intervention. The assessment of demonstration sites – SAPLAST and Thakek disposal site was already conducted.

TOR for plastic pipes production equipment; plastic washing and plastic extrusion lines for SAPLAST factory in Vientiane was developed and completed. RFP and submission of bids was already conducted and currently being evaluated. On the other hand, the TOR for the proposed material recovery facility of waste material at the Thakek dumping site is being prepared by UNIDO expert and shall be sent to Thakek district and UDAA for review.

**B.4 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.**

The only remaining activity for Laos in this component is Activity 4.2.3 which is the development of educational programs for schools and families on open burning and waste management. It was reported that this shall be conducted within 2019.

The NPM of Laos, as well as the other NPMs were reminded by the RPM to submit the lacking documents specifically the Co-financing and the Cooperation Agreements. Also, it was emphasized by the RPM to provide the Proof of Accomplishment in those activities that were reported as accomplished since these are important documents needed in preparation for the Mid-Term Report which is to be submitted in the middle of 2019.

Attached as Annex F is the Workplan of Laos for 2019 and Annex F1 is the Laos Activity Matrix.

### **III.B.5 VIETNAM**

**B.5 Outcome 1: Strengthened legislative capacity for introducing BAT/BEP in waste open burning source category.**

For this component, the NPM of Vietnam reported that there are still some activities that need to be accomplished and these include (Activities 1.1.2, 1.1.3 and 1.1.6) the finalization of the technical guideline on retrieval and disposal of discarded products as

well as the finalization of the report on current economic instruments for environmental management and waste management; and a financial model (loan model) for productive households at craft villages. While the program for Activity 1.1.4 has already been developed and ready for implementation.

**B.5 Outcome 2: Enhanced institutional capacity to carry out BAT/BEP implementation.**

Activities 2.1.2, 2.1.3 and 2.1.4 have yet to be undertaken. It is planned that these be undertaken in one Training on the second quarter of 2019. Final report for Activity 2.1.5 is still for finalization.

**B.5 Outcome 3: BAT/BEP implemented in open burning sources.**

The TOR, RFP and evaluation were already executed for the intervention in Vietnam. The intervention involved provision of services and equipment for two plastic recycling craft villages (Phan Boi and Minh Khai). The inception report has been submitted though since its submission and upon review of the PMU, there were some issues that were not resolved. Hence, it was decided to hold a meeting with PMU and contractor together with UNIDO during the scheduled PSC to discuss the issues.

**B.5 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.**

Almost all of the activities for Component 4 has already been accomplished in Vietnam except for the finalization of the information materials such as the paper fan, brochures and videos.

Attached as Annex G is the Workplan of Vietnam for 2019 and Annex G1 is the Vietnam Activity Matrix.

After the country reports, the RPM then proceeded to discuss some Regional Activities and Plans.

#### **IV. REGIONAL PLANS/ACTIVITIES**

Several issues were discussed by the RPM for the regional activities including monitoring activities, remaining budget, importance of a regional platform and regional conference.

The first thing that was discussed was about the monitoring activities. The RPM mentioned that two of the remaining major Regional Activities pertain to collection of data, evaluation and monitoring aspects of the demonstration sites. These are:

*Activity 3.1.1 Collect detailed environmental and socio-economic data and formulate impact indicators and evaluate climate change mitigation/adaptation aspects at the selected demonstration sites. Consider specific local/regional circumstances related to open burning; and*

*Activity 3.1.2: Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites*

Dr. Centeno presented two possible options that could be undertaken to implement the activity 3.1.2.

- Option 1 – to recommend Dioxin Laboratory of Vietnam to do the tasks or
- Option 2 – to go through the usual process of general bidding

It was recalled that the Dioxin Lab was the service provider during the training of Laboratory Technicians from the 5 participating countries last November 2017 which was successfully executed. Dioxin lab has a lot of calibration studies with UNEP and has already gained its international accreditation. The existence of Dioxin Lab in Vietnam ascertains that there is already a service provider for analytical and theoretical trainings and analyses regarding Dioxin, POPs and other contaminants within the region.

The Assistant Director of the Environmental Management Bureau from the Philippines proposed for Option 1 – to recommend the Dioxin Lab since it was already proven that they are equipped and capable in doing these tasks. She also mentioned that Philippines for one would need their assistance since it is now in the process of establishing its protocols. Laos seconded and agreed to recommend Vietnam Dioxin Lab, followed by Mongolia and Cambodia, who mentioned that the Lab has already gained its International Accreditation for UPOPs analysis. The Project Director of Vietnam also agreed and promised to communicate the recommendation made by the PSC members.

The RPM then stated that this was just the option and it is still to be confirmed with the Dioxin Lab if they are willing to take the tasks. If so, Dr. Centeno will then apply for the waiver of the bidding process and shall finalize the TOR. In case the Vietnam Dioxin Lab will not agree, then the only option would be to go for the global bidding process.

The second issue that was put on the table for the PSC members to decide on was whether there is a need to request for a project extension or not. The time needed to implement the activities especially in Component 3 in each of the four countries was then discussed. It turned out that it is indeed impossible to achieve and finish all target activities within the remaining time of the

project implementation. Philippines then moved for the approval to recommend for a one-year extension and Mongolia seconded the move.

Another important issue discussed was about the rewards of having a Regional Platform in a project. Aside from the learning and sharing of resources by the different countries involved, the RPM asked how the benefits of a regional collaboration further be highlighted. She asked the body to try to see and recall the actual advantages that could be gathered from this type of collaboration.

The RPM also showed the remaining budget of the Project (attached as Annex H) and mentioned that already considering all other remaining expenses and the requested extension, there will still be around \$200,000 that could be allotted for relevant activities.

The plan to have the regional conference to take place before the project ends as well as the possibility to reproduce the toolkits and other information materials including the IEC videos to share with other countries were also discussed. Lastly, it was decided that the next PSC Meeting shall be held in Mongolia either April or July in 2020.

Before the discussion on the Regional Activities, Dr. Centeno reminded again all NPMs to revisit the log frame and see their accomplishments via the indicators stated.

## **V. PRESENTATION OF THE SWEET ENMOS PROJECT IN THE PHILIPPINES**

Ms. Juvinia Serafin from the Philippines presented the Solid Waste Enforcement and Education Program (SWEEP). This program in the Philippines aims to extend the reach of the National Government particularly up to the smallest unit of the government, the barangays. In this program, individuals are trained to see to it that households adhere to the environmental laws particularly in managing their waste. These individuals are trained not only to report the violators but more so to talk and discuss the problems with the barangay officials on how they can address their problem on waste management. They help in clean up drives, educate the various stakeholders and barangay dwellers, assist in the IEC and Barangay SWM Programs.

It was mentioned during the presentation that the program has been successful not only in informing the public but as well as in slowly changing their behavior especially in waste management. Different kinds of maps were also produced under this projects that helps the authority in monitoring the compliance of different municipalities and cities.

After the presentation, Dr. Centeno mentioned that the very reason why she thought of having the program shared to the group was for the countries to learn from it and have an idea how it could be done specially for Lao PDR and Cambodia.

## **VI. PRESENTATION OF THE INITIAL RESULTS OF THE MID-TERM EVALUATION**

Ms. Suman Lederer, the MTE expert presented her findings as contained in her initial report.

She focused on the highlights and some of the general statements presented are the following:

- The project is found to be relevant by the stakeholders in the Philippines and Vietnam and that the project should continue to encourage cooperation and participation of all stakeholders.
- Project expenditure is just right and acceptable.
- There were still some lacking documents that need to be submitted e.g. co-financing particularly Lao PDR
- Component 3 for the Philippines was way advance in its implementation, but all other remaining countries have to be expedited otherwise should recommend to apply for a project extension.
- Documentation very well maintained
- Good cooperation and work environment between PMU and stakeholders
- Strong support and commitment reiterated by all the interviewed stakeholders
- Timely and effective inputs provided by all the stakeholders
- PMU, National experts and International experts and the project outputs appreciated by all the interviewed stakeholders

Lessons Learned include: Regular face-to-face PSC and NPM meetings facilitate joint efforts and can prove to be a motivational factor for achieving project outputs.

Effective communication between various stakeholders facilitates joint efforts for effective and efficient project implementation.

After the presentation, discussion on the following took place:

- Considering the project activities, a project extension shall be recommended
- The regional website can be hosted by the Philippines after project life
- National websites should be hosted by each country and could be linked to Government National websites
- The existence of the Dioxin Lab in the region has definitely an advantage specially during the training for laboratories
- The toolkit developed was also very good output.
- To ensure sustainability of project interventions, they should already be included in the work plan of each of the government partner.
- Lastly, it was suggested to include in lessons learned that the sense of ownership by the host government of the intervention is very important for a project to be successfully implemented.

## **VII. OTHER ISSUES DISCUSSED DURING THE TCM**

The strategic planning and the bilateral meeting of the NPMs took place on the second day. The NPMs together with the Regional Project Manager, Dr. Centeno, had a deeper discussion of Component 3 as well as other strategies to accomplish the remaining activities. Details of which

can be found in the table below in the Agreements Arrived at during the 4<sup>th</sup> PSC.

Other documents that need to be submitted were also emphasized such as the Cooperation Agreement, Co-financing and proof of accomplishments. NPMs were also reminded of some administrative matters such as the management of files in which file names should already identify the country and the component. Hence, it was agreed upon that files should again be uploaded in another Google drive (to be created by the RTC) and should be named/coded as PH111; VN111; KH111; MN111; LA111. Etc.

On the third day a site visit was undertaken and sharing of experiences among participants took place and on the following day, almost all of the participants went back to their home countries.

### VIII. AGREEMENTS ARRIVED AT DURING THE 4<sup>th</sup> PSC MEETING and TC MEETING

Following are the activities to be undertaken and other **AGREEMENTS** arrived at during the PSC and TC Meetings:

<b>Short Description</b>	<b>Responsible Person(s)</b>	<b>Deadline</b>
Submit BTOMR	ALL NPMs	-ASAP
Draft Minutes of the PSC (for distribution and comments of countries)	H. Penero	Before end of month (a week after the meeting)
Minutes of Meeting with VEA, PMU and VNCPC	D.Linh	Before end of month (a week after the meeting)
Submit Cooperation Agreement and Co-Financing documents	V.Chundara	End of the month (for June Submission)
Finalize the MTE Report	S. Lederer	End of the month
Organize documents and files	ALL NPMs (Virasack, Badam, Phet, DieuLinh, Penero)	End of April
Create new G-drive	H. Penero	End of month
Provide lacking proof of accomplishments	ALL NPMs	Before end of month (a week after the meeting)
Provide advantages/ benefits of regional collaboration	ALL countries	-ASAP
Regional Video (find or look for good videographer)	NPMs/PMUs to suggest	-ASAP
Finalize/edit/identify documents	ALL NPMs (Virasack,	-ASAP

for the SWM Plan for each country (Act 3.2.1)	Badam, Phet, DieuLinh, Penero)	
Share the 3 <sup>rd</sup> PIR to concerned offices specially the GEF Focal (to be sent by the Regional Project Manager by the end of the month)	C. Centeno and NPMs (Virasack, Badam, Phet, DieuLinh, Penero)	End of the Month to early April
Provide updates about the coordination of Vietnam PMU with Dioxin Lab Monitoring (Activity 3.1.2)	D. Linh	Once available
Follow up draft TOR by Andrea for 3.1.2 and provide it to Dioxin Lab (if they will agree to accept the task)	H. Penero/D. Linh / C. Centeno	Once available
To request Massimo to make a summary of all the Interventions	C. Centeno	
Submit a more detailed workplan to be used as annexes for the 1 year extension request.	ALL NPMs (Virasack, Badam, Phet, DieuLinh, Penero)	End of the Month to early April

## ANNEX A

**Project “Demonstration of BAT and BEP in  
Open Burning Activities in Response to the Stockholm Convention on POPs”  
4<sup>th</sup> PSC MEETING**

**AGENDA and PROGRAMME**

**Day 1: March 14, 2019 – Thursday**

Time	Activity	Responsible
<b>Morning Session</b>		
9:00 – 9:30	Registration & Coffee	All participants
9:30 – 10:00	Opening Session  Introduction of Participants  Opening Remarks and Objective of the Meeting  Group Photo	Chair – Vietnam (Mr. Le Hoai Nam)  UNIDO Project Manager (Ms. Carmela Centeno)
<b>Cont. Morning Session (PSC)</b>		
10:00 - 10:30	Minutes and Agreements during the 3 <sup>rd</sup> PSC Meeting held in Philippines	Project Coordinator (Ms. Haidee Pinero)
10:30 – 12:00	Country Reports and Workplan for 2019  <i>(30 minutes for each presentation)</i>	National Project Managers
12:00 – 13:30	<i>Lunch</i>	
<b>Afternoon Session</b>		
13:30 – 14:45	Country Reports and Workplan for 2019	National Project Managers
14:45 - 15:00	Coffee break	All participants
15:00 - 17:15	Presentation of Initial Results of the Midterm Review	Ms. Suman Lederer/UNIDO Project Manager

	Discussion	All participants
17:15 - 17:30	Wrap up	UNIDO Project Manager
17:30	Reception	

**Day 2: March 15, 2019- Friday**

<b>Time</b>	<b>Activity</b>	<b>Responsible</b>
9:00 – 10:30	Meeting with Contractor of Component 3 of Vietnam	UNIDO Project Manager, PMU of Vietnam and VNCPC
10:30 - 10:45	Coffee break	
10:45 - 12:00	Strategic Planning to address issues and concerns discussed as way forward	UNIDO Project Manager and Participating countries
12:00 – 13:30	Lunch	
13:30 – 17:00	Strategic Planning to address issues and concerns discussed as way forward ( <i>continue</i> )	UNIDO Project Manager and Participating countries

**Day 3: March 16, 2019 - Saturday**

<b>Time</b>	<b>Activity</b>	<b>Responsible</b>
7:00 – 17:00	Site visit	

ANNEX B



Project "Demonstration of BAT and BEP in open burning activities in response to the Stockholm Convention on POPs"

Signature of participants-4th PSC Meeting in Vietnam

No.	Full name	Country	Position	14-Mar	15-Mar	16-Mar
1	Ms. Carmela Centeno	UNIDO	PM	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	Ms. Suman Lederer	UNIDO	MTR Expert	<i>[Signature]</i>		<i>[Signature]</i>
3	Ms. Le Thi Thanh Thao	UNIDO CO Vietnam	Country Representative	<i>[Signature]</i>		
4	Ms. Tran Tuyet Van	UNIDO CO Vietnam	Admin Assistance	<i>[Signature]</i>		
5	Mr. Le Hoai Nam	Vietnam	NPD	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
6	Ms. Dang Thuy Linh	Vietnam	NPC	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
7	Ms. Hoang Thi Dieu Linh	Vietnam	NPM	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
8	Ms. Lê Thi Nam Phuong	Vietnam	Official GEF Vietnam office	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
9	Ms. Nguyen Thi Cam Uyen	Vietnam	PMU member	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
10	Mr. Dinh Viet Cuong	Vietnam	Department of Waste Management	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
11	Mr. Heng Nareth	Cambodia	NPC	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
12	Mr. Phet Pichhara	Cambodia	NPM	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
13	Mr. Taing Meng Eang	Cambodia	Director, Department of Green Economy	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

14	Mr. BATZAYA Nogoya	Mongolia	Chief Division, Cadastre on Forest, Water and Protected areas	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
15	Mr. Badam Delgerbayar	Mongolia	NPM	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
16	Ms. Vizmindia Osorio	Philippines	NPC	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
17	Ms. Lourdes Wagan	Philippines	GEF OFF	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
18	Ms. Haidee Piniero	Philippines	NPM	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
19	Ms. Juvinia Serafin	Philippines	SWEET Programme	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
20	Mr. Khamhou Tounnalom	Laos	NPC	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
21	Mr. Virasack Chundara	Laos	NPM	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>

Nguyen Mai Quy  
 @ Xia Ting  
 Pq Thi Lien  
 Ha Lau Anh

Vinacolor  
 WPC  
 WPC  
 Vinacolor

*[Signature]*  
*[Signature]*  
*[Signature]*



Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.									
Component 5 - Monitoring and Evaluation									
Output 5.1: M&E framework of the project established									
Output 5.2: Project Impact Monitoring System Identified and Implemented									

ANNEX C1

PROGRESS OF ACTIVITIES (March 2019)

COUNTRY: PHILIPPINES

Project Framework	Progress/Remarks
<p><b>OUTCOME 1: STRENGTHENED LEGISLATIVE CAPACITY FOR INTRODUCING BAT/BEP IN WASTE OPEN BURNING SECTOR</b></p>	<p>RA 9003 is already comprehensive law that already includes prohibition of open burning. Hence, a clarification of the prohibition via an NSWMC Resolution and/or a Memorandum Circular from EMB shall be issued instead.</p>
<p><b>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.</b></p>	
<p>Activity 1.1.1: Asses the impacts of common and traditional open burning practices in the region in terms of releases of U-POPs, GHG emissions, and other contaminants, and the effects/benefits of BAT/BEP application.</p>	<p>Final National Assessment Report was already submitted. 100% Completed</p>
<p>Activity 1.1.2: Formulate and propose legislative changes and updated regulations on waste and landfill management targeting common open burning practices. Specifically address U-POPs and other contaminants, consider enabling establishment of financing mechanisms.</p>	<p>Consultation with stakeholders through workshops and consultation with experts already conducted. A National Solid Waste Management Commission (NSWMC) Resolution was already drafted and for submission to NSWMC for approval.</p>
<p>Activity 1.1.3: Develop and introduce financing mechanisms and incentive systems based on the updated legislation in support of BAT/BEP implementation.</p>	<p>Collation of financing mechanism and incentive systems in the Philippines is on-going.</p>

<p>Activity 1.1.4: Hold workshops and trainings to raise awareness of the impacts and opportunities of the proposed revised legal framework; discuss and disseminate to all relevant stakeholders (in English and local languages).</p>	
<p>Activity 1.1.5: Develop toolkits for waste management, including recommendations for BAT/BEP guidelines update (in English and local languages).</p>	<p>Integrated Solid Waste Management TOOLKIT to Implement BAT and BEP in Open Burning was developed by international consultant. National Training already conducted and toolkit reproduced and distributed to 75 trainees.</p>
<p>Activity 1.1.6: Develop manuals for using financing mechanisms and incentive systems in waste management (in English and local languages).</p>	<p>Manual development is on-going.</p>
<p><b>OUTCOME 2: ENHANCED INSTITUTIONAL CAPACITY TO CARRY OUT BAT/BEP IMPLEMENTATION</b></p>	
<p><b>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.</b></p>	
<p>Activity 2.1.1: Establish a web-based regional cooperation platform to specifically address open burning issues.</p>	<p>The project website ‘<a href="http://stopopenburningph.org/">http://stopopenburningph.org/</a>’ was developed and maintained. <b>100% Completed.</b></p>
<p>Activity 2.1.2: Carry out targeted trainings for public officers and local authorities involved in waste management, as well as for community stakeholders, aimed to introduce BAT/BEP concepts. Special consideration on gender by encouraging participation of women.</p>	<ul style="list-style-type: none"> <li>- Regional Training Program on ToT BAT and BEP on Open Burning for Key Stakeholders conducted in the Philippines on 28.Feb.2018-02.March.2018. There were six (6) participants from the Philippines.</li> <li>- National workshop was already conducted with 75 participants on September 2018. <b>100% Completed.</b></li> </ul>

<p>Activity 2.1.3: Carry out targeted trainings for regional/national/local technical staff on disposal facilities (landfill, open dumpsites) on issues connected with open burning sector and BAT/BEP.</p>	<p>Training conducted in project site where 93 pax participated including environmental officers from the Barangays. <b>100% Completed.</b></p>
<p>Activity 2.1.4. Carry out education and training on application of financing mechanisms and incentive systems in support of BAT/BEP implementation. Special consideration on gender by encouraging participation of women.</p>	
<p>Activity 2.1.5: Introduce standardized methodologies for carrying out inventories of number and types of waste disposal facilities, dumpsites and landfills in the participating countries, and update them continuously.</p>	<p>Inventory report (Part of the National Report on the Assessment of Impacts of Traditional Open Burning Practices) 100% <b>Completed.</b></p>
<p><b>Output 2.2: Enhanced regional/national institutional capacity through the implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.</b></p>	
<p>Activity 2.2.1: Strengthen the capability of regional/national laboratories for sampling and analysing UP-POPs, GHG emissions and other contaminants relevant for common landfill management and open burning practices.</p>	<p>The regional training was organised November 2017 in Hanoi, Vietnam . Two lab technicians attended the training coming from the National and Region 12 Laboratories. <b>100% Completed</b></p>
<p>Activity 2.2.2: Train management personnel in monitoring, evaluating and reporting on U-POPs, GHG emissions and other contaminants released by open burning.</p>	<p>Part of 2.2.1 <b>100% Completed.</b></p>
<p>Activity 2.2.3: Introduce/implement standardized methodologies to continuously update inventories of U-POPs releases from open burning practices.</p>	

<b>OUTCOME 3: BAT/BEP IMPLEMENTED IN OPEN BURNING SOURCES</b>	
<b>Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.</b>	
Activity 3.1.1: Collect detailed environmental and socio-economic data and formulate impact indicators, and evaluate climate change mitigation/adaptation aspects at the selected demonstration sites. Consider specific local/regional circumstances related to open burning.	TOR Development. UNIDO Procurement
Activity 3.1.2: Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites.	TOR Development. UNIDO Procurement
<b>Output 3.2: BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country.</b>	
Activity 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.	There is an approved SWM Plan of GSC that is for implementation for 5 years. (approved June 2016) <b>100% Completed</b>
Activity 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.	Cambodia
Activity 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	Lao PDR

PDR.	
Activity 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 mitigation/adaptation.	Mongolia
Activity 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.	CMRF Constructed December 2018 and inaugurated February 2019
Activity 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.	Vietnam
Activity 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.	---
Activity 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.	---
<b>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</b>	

<p><b>Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.</b></p>	
<p>Activity 4.1:1: Carry out targeted awareness raising campaigns on environmental and health hazards of U-POPs for public officials, professionals, community leaders, farmers and scavengers. Encourage women participation.</p>	<p>3 major awareness raising (2 fun runs and 1 poster making and photo contest) Completed</p> <p>3 conferences 2 exhibitions ON-GOING</p> <p>Materials Distributed</p> <ul style="list-style-type: none"> <li>- Brochures (4,040pcs)</li> <li>- posters (2,825pcs)</li> <li>- IEC video ON-GOING</li> <li>- video documentary ON-GOING</li> <li>- t-shirts (450pcs)</li> <li>- singlets (436pcs)</li> <li>- umbrellas (130pcs)</li> <li>- mugs (200)</li> <li>- drawstring bags (595pcs)</li> <li>- hand fans (595pcs)</li> </ul>
<p>Activity 4.1.2: Develop project website and dissemination materials to share information with stakeholders, also using the established collaboration platform. Include information on business opportunities, incentive systems and financing mechanisms.</p>	<p>national website developed (for turn over to government partner EMB) <b>100% Completed.</b></p> <p><a href="http://www.stopopenburningph.org">www.stopopenburningph.org</a></p>
<p><b>Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.</b></p>	
<p>Activity 4.2.1: Set up trainings for local stakeholders on alternative biomass utilization, recycling and reuse of waste. Include business opportunities and</p>	<p>Training in GSC – Barangays and other Stakeholders</p> <p>Training of farmers and various stakeholders (Dec 2017 with 93 pax) ; Training of farmers and various</p>

encourage participation of women.	stakeholders (September 2018 with 75 pax) <b>100% Completed</b>
Activity 4.2.2: Design educational programs for schools and families on open burning and waste management. Encourage participation of women.	Development of the Social Marketing and Advocacy Plan (Nov 2016) <b>100% Completed</b>
Activity 4.2.3: Develop education curricula at university level focused on BAT/BEP in waste management and benefits of their implementation. Advanced information on incentive systems and financing mechanisms.	Two Universities (PLM and DLSU) were chosen and given the course from Jan – May 2017. Included Open burning and Existing Philippine Laws in the syllabus for energy engineering graduate classes. (90% Completed)
<b>OUTCOME 5: ESTABLISHED PROJECT MANAGEMENT STRUCTURE AND THE SYSTEM FOR MONITORING/EVALUATION OF PROJECT IMPACT</b>	
<b>Output 5.2: Project impact monitoring system identified and implemented.</b>	
Activity 5.2.1: Hold project Inception Workshop.	Project inception workshop was organized on Feb,4-5, 2016.
Activity 5.2.2: Measure impact indicators on an annual basis	Ongoing
Activity 5.2.3: Prepare Annual Project Reports and Project Implementation Reports	Three PIR accomplished – September of each year since 2016
Activity 5.2.4: Hold annual PSC meetings	PSC Cambodia, Vienna, Phils (May 2015-Cam, Dec 2016 Vienna, Feb 2018 Phils). Technical Coordination Meetings (TCM) - Feb 2017 BKK  Oct 2017 Vienna
Activity 5.2.5: Carry out mid-term external evaluation	Mid Term evaluation Completed (November 2018)
Activity 5.2.6: Carry out annual visits to	

selected field sites	
Activity 5.2.7: Establish a project management information system (MIS), including project website to disseminate information to stakeholders	Regional Website on-going
Activity 5.2.8: Carry out final external evaluation	
Activity 5.2.9: Complete Project Terminal Report	
<b>Project costs</b>	
<b>Project management cost</b>	
<b>TOTAL Project costs</b>	

## Workplan-2019 Mongolia

PROJECT COMPONENT	ACTIVITIES	WHO (regional/national)	Output Indicator per Activity	Q1	Q2	Q3	Q4
<b>Project OBJECTIVE:</b> Create resource efficient waste management to reduce U-POPs emission through the introduction of BAT/BEP in open burning sources <b>Target:</b> Achieve a reduction of app. 90% of current PCDD/PCDF releases at the pilot demonstration activities in the participating countries.							
<b>2. Institutional Strengthening</b>							
<b>OUTCOME 2:</b> Enhanced institutional capacity to carry out BAT/BEP implementation							
<b>Output 2.1:</b> Strengthened human resources/ institutions on regional/ national levels on waste management and BAT/BEP implementation in open burning of biomass and wastes.	2.1.1 Update national web site and develop English version of a web site	National	Website				
	2.1.3 Carry out targeted trainings for /national/local technical staff on disposal facilities (landfill, open dumpsites) on issues connected with open burning sector and BAT/BEP.	National	Training Program and materials; Training Report and number of trained pax				
<b>3. Demonstration Activities</b>							
<b>OUTCOME 3:</b> BAT/BEP implemented in open burning sources							
<b>Output 3.1:</b> Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.	3.1.2 Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites	UNIDO - procurement/International	Analytical reports (5)				
<b>Output 3.2:</b> BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country.	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	UNIDO-Recruitment - assessment of each site/International/national	Update National and UB City WMI Implementation Plan				

	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 mitigation/adaptation (Start construction work of landfill cell and storage and repair facility )	International/National	Progress Reports of construction <b>(Construction work Detailed work plan attached separately )</b>					
<b>4. Education and Awareness</b>								
<b>OUTCOME 4:</b> Improved knowledge and understanding on BAT/BEP and on risks connected with U-PODs GHG emissions and other contaminants released through open burning								
<b>Output 4.1:</b> Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.	4.1.4. Training course on Integrated waste management							
	4.1.5.3 min animation video production of proper discharge of waste and recycling.							
<b>Output 4.2:</b> Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.	4.2.3 Develop education curricula at university level focused on U-PODs, BAT/BEP in waste management and benefits of their implementation. Advanced information on incentive systems and financing mechanisms.							
<b>5. Monitoring and Evaluation</b>								
<b>OUTCOME 5:</b> Established project management structure and the system for monitoring/ evaluation of project impacts+AZ								
	5.1.3 Prepare Project Reports and Project Implementation Reports							
	5.1.4 Hold PSC and PMU meeting	NPM						
	5.1.6 Carry out visits to selected field sites	PMU,NPM						
	5.1.7 Establish a project management information system (MIS), including project website to disseminate information to stakeholders							

ANNEX D1

PROGRESS OF ACTIVITIES

COUNTRY: **Mongolia**

Project Framework	Progress/Remarks
<b>OUTCOME 1: STRENGTHENED LEGISLATIVE CAPACITY FOR INTRODUCING BAT/BEP IN WASTE OPEN BURNING SECTOR</b>	
<b>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.</b>	
Activity 1.1.1: Asses the impacts of common and traditional open burning practices in the region in terms of releases of U-POPs, GHG emissions, and other contaminants, and the effects/benefits of BAT/BEP application.	Assessment Report 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 submitted to UNIDO HQ on August 02,2018. <b>Completed</b>
Activity 1.1.2: Formulate and propose legislative changes and updated regulations on waste and landfill management targeting common open burning practices. Specifically address U-POPs and other contaminants, consider enabling establishment of financing mechanisms.	Report on Improvement of legal and regulatory frameworks for open burning to facilitate waste management improvements and BAT/BEP and to enable introduction of financing mechanisms submitted to UNIDO HQ on Match,30,2017. Amendment of Law on Waste Mongolia Approved and ratified by Parliament of Mongolia 17.May.2017. <b>Completed</b>
Activity 1.1.3: Develop and introduce financing mechanisms and incentive systems based on the updated legislation in support of BAT/BEP implementation.	Conducted assessment and analysis on existing economic instrument and practices of financing mechanisms and incentive systems of waste management in Mongolia and carried out assessment on

	<p>international cases, studies and regulations related financial mechanism, incentive systems introduced in waste management. The Report on National and International Economic Instrument, Financing Mechanisms and Incentive Systems of Waste Management and Proposed Financial Mechanisms and Incentive System in Mongolia was submitted to UNIDO HQ on March,30,2017. <b>Completed</b></p>
<p>Activity 1.1.4: Hold workshops and trainings to raise awareness of the impacts and opportunities of the proposed revised legal framework; discuss and disseminate to all relevant stakeholders (in English and local languages).</p>	<ul style="list-style-type: none"> <li>• The FGD meeting was organized in Municipal of Ulaanbaatar office, on 23 Sep to introduce the study on existing national and international legal framework of waste, and amendment of waste law to get an opinion and comments from the khoroo and district governors who deal with waste issue more closely. There were 134 khoroo governors of central 6 districts of Ulaanbaatar city and head of infrastructure and public service department of 6 districts have attended to the meeting.</li> <li>• The consultation/review workshop was jointly organized by the Ministry of Environment and Tourism (MET) of Mongolia and the UNEP International Environmental Technology Centre (UNEP IETC), under the project 'Delivering integrated solutions at the National and Local level' for 3 days, between 14-16 December, 2016.</li> <li>• The Focus Group Discussion meeting was jointly organized with City Maintenance and Waste Management department of Mayor's Office of Ulaanbaatar city on 30 March 2017 to discuss financing mechanism and incentive system of waste management.</li> <li>• The Research, theoretical and practical 5th conference on "Sustainable development- waste management" organised by Department of Environmental engineering, School of Civil Engineering and Architecture, and Mongolian University of Science and Technology (MUST) and on April 26, 2017. There were 46 representatives from 12 organizations including state, private, social organizations, NGO and research institutions, and 40 graduate students have attended at the conference.</li> <li>• The training to government employee and key stakeholders jointly organized with City Maintenance and Waste Management department of Mayor's Office of Ulaanbaatar city on 16 May 2017. There were around</li> </ul>

	<p>150 participants from district, khoroo and city level government organization and introduced newly passed Amendment Law on Waste 2017.</p> <p><b>Completed.</b></p>
<p>Activity 1.1.5: Develop toolkits for waste management, including recommendations for BAT/BEP guidelines update (in English and local languages).</p>	<p>Integrated Solid Waste Management TOOLKIT to Implement BAT and BEP to Open Burning is developed by international consultant. Translation of the TOOLKIT in local languages is not started. (need to be financial support from UNIDO for a translation of Toolkit)</p> <p><b>Ongoing.</b></p>
<p>Activity 1.1.6: Develop manuals for using financing mechanisms and incentive systems in waste management (in English and local languages).</p>	<p>The manual has been developed and it shall be used for developing procedure to be complied to support, advertise and incentivize the citizens, business entities and organizations that run activities or introduced BAT/BEP that transfer environmentally sound, pollution-free and non-waste technologies to save natural resources, and reduce pollutions. <b>Completed.</b></p>
<p><b>OUTCOME 2: ENHANCED INSTITUTIONAL CAPACITY TO CARRY OUT BAT/BEP IMPLEMENTATION</b></p>	
<p><b>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.</b></p>	
<p>Activity 2.1.1: Establish a web-based regional cooperation platform to specifically address open burning issues.</p>	<p>The project website '<a href="http://stopopenburningmn.org/">http://stopopenburningmn.org/</a>' was developed Mongolian and English linked to the regional website. <b>Completed.</b></p>

<p>Activity 2.1.2: Carry out targeted trainings for public officers and local authorities involved in waste management, as well as for community stakeholders, aimed to introduce BAT/BEP concepts. Special consideration on gender by encouraging participation of women.</p>	<ul style="list-style-type: none"> <li>Regional Training Program on ToT BAT and BEP on Open Burning for Key Stakeholders developed. The Regional workshop (ToT) was organized in Manila Philippines 28.Feb.2018-02.March.2018. Mr. Nyamdavaa ( Director of the Department of Environment and Nature Resources Management , MET ), Mr.Ariguun (Senior Officer of Mayor's Office of Ulaanbaatar City) Mr. Batbaatar (Deputy Director of the Disposal site operation company ) were participated the Regional workshop (ToT).</li> <li>National workshop (ToT) was organized in 25 Jan, 2019 in Ulaanbaatar City and 21 provinces public officers were participated. <b>Completed.</b></li> </ul>
<p>Activity 2.1.3: Carry out targeted trainings for regional/national/local technical staff on disposal facilities (landfill, open dumpsites) on issues connected with open burning sector and BAT/BEP.</p>	<p>Planning to organize targeted training for local technical staffs on disposal sites after completion of construction of landfill site for ash disposal. <b>Ongoing.</b></p>
<p>Activity 2.1.4. Carry out education and training on application of financing mechanisms and incentive systems in support of BAT/BEP implementation. Special consideration on gender by encouraging participation of women.</p>	<ul style="list-style-type: none"> <li>The training to relevant stakeholder application of financing mechanisms and incentive systems in support of BAT/BEP implementation was organized in cooperation with Zorig foundation on April 28, 2017. There were 21 participants including environmental inspectors and specialists from all 21 provinces of Mongolia. <b>Completed.</b></li> </ul>
<p>Activity 2.1.5: Introduce standardized methodologies for carrying out inventories of number and types of waste disposal facilities, dumpsites and landfills in the participating countries, and update them continuously.</p>	<ul style="list-style-type: none"> <li>Collected inventory of disposal sites and illegal dump sides in nationwide (21 aimags and about 100 soums) using the Guideline/Checklists provided by UNIDO consultant, and conducting analysis on its result.</li> <li>Visited 6 waste disposal areas which are close to Ulaanbaatar city to conduct field survey on May 20 and 23, 2017. During the field survey, we have used drone (an unmanned aerial vehicle (UAV)) to determine actual size of dumpsites and to assess surrounding contaminated areas of the waste disposal areas, and working and analyzing field survey results. Results of the inventory and field survey were included the Report of "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" <b>Completed.</b></li> </ul>

<b>Output 2.2: Enhanced regional/national institutional capacity through the implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.</b>	
Activity 2.2.1: Strengthen the capability of regional/national laboratories for sampling and analysing UP-POPs, GHG emissions and other contaminants relevant for common landfill management and open burning practices.	The regional training was organised 20 - 30 November 2017 in Hanoi, Vietnám . Trainers from the Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences:  M. Bayarjargal, Ph.D, Head of Laboratory of Biochemistry  D. Otgonsuren, MSc, Researcher of POPs Laboratory were participated. <b>Completed</b>
Activity 2.2.2: Train management personnel in monitoring, evaluating and reporting on U-POPs, GHG emissions and other contaminants released by open burning.	Part of 2.2.1
Activity 2.2.3: Introduce/implement standardized methodologies to continuously update inventories of U-POPs releases from open burning practices.	U-pops inventory have been done in 2013 in Mongolia and the report of inventory submitted to UNIDO and included the inception report.
<b>OUTCOME 3: BAT/BEP IMPLEMENTED IN OPEN BURNING SOURCES</b>	
<b>Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.</b>	
Activity 3.1.1: Collect detailed environmental and socio-economic data and formulate impact indicators, and evaluate climate change mitigation/adaptation aspects at the	International expert; Report shall be circulated for further planning. <b>Ongoing.</b>

selected demonstration sites. Consider specific local/regional circumstances related to open burning.	
Activity 3.1.2: Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites.	UNIDO – procurement (international expert) <b>Ongoing.</b>
<b>Output 3.2: BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country.</b>	
Activity 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.	UNIDO-Recruitment - assessment of each site <b>Ongoing.</b>
Activity 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.	
Activity 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.	
Activity 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 mitigation/adaptation.	<ul style="list-style-type: none"> <li>• Toonto LLC finalized "The design drawing and cost estimation for the construction of landfill cell for ash disposal and a storage facility and submitted to UNIDO on May.30. 2018.</li> <li>• "Terms Of Reference For The Construction Of Landfill Cell For Ash Disposal And A Storage And Maintenance Facility For Containers For Chemicals And Ash At Tsagaan Davaa Site In Ulaanbaatar City" and bidding documents for construction work were finalized and submitted</li> </ul>

	<p>to UNIDO on 1st of August,2018</p> <ul style="list-style-type: none"> <li>• Tender call and RFP of the Construction work of the Landfill cell for ash disposal and a storage and maintenance facility was announced on August.8, 2018 and closed on September.28.2018.</li> <li>• Technical tender bid evaluation was on November 19-23 in UNIDO HQ, Vienna. Austria.</li> <li>• Tusgal tuv LCC contracted with UNIDO for the construction of landfill cell and maintenance facility on Jan 2019 and submitted detailed work plan and organized kick off meetings with stakeholders.</li> </ul>
Activity 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.	
Activity 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.	
Activity 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.	<b>Not started !</b>
Activity 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.	<b>Not started !</b>
<b>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</b>	

<p><b>Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.</b></p>	
<p>Activity 4.1.1: Carry out targeted awareness raising campaigns on environmental and health hazards of U-POPs for public officials, professionals, community leaders, farmers and scavengers. Encourage women participation.</p>	<p>ICCT organized workshop for primary audiences in 16th June, 2017 about Legal framework on waste management. Total of more than 200 people were participated in this workshop. <b>Completed.</b></p>
<p>Activity 4.1.2: Develop project website and dissemination materials to share information with stakeholders, also using the established collaboration platform. Include information on business opportunities, incentive systems and financing mechanisms.</p>	<ul style="list-style-type: none"> <li>• The project website <a href="http://www.stopopenburningmn.org">www.stopopenburningmn.org</a> was developed Mongolian and English language.</li> <li>• ICCT has prepared eco bags, T-shirts, caps two brochures and one booklet. Over 700 T-shirts, caps, bags and more than 3000 dissemination materials (brochures, booklets, CD,DVDs) were distributed during the workshops and trainings that organized within the project. Also all the information materials have been placed in the project webpage.</li> <li>• 10-minute short movie about risk of human health and environment from open burning is completed and translated into English. The movie was introduced during the PSC meeting in Manila, on March,2018 and delivered UNIDO.</li> <li>• Organized cleaning activity on 21th May, 2017 at Chingeltei district and Sukhbaatar district. Total of 490 people were participated and cleaned 9531000 square meter area and collected and transported 111 tonn waste to the disposal site. During the site event ICCT distributed t-shirts and cups and disseminations materials as well. <b>Completed.</b></li> </ul>
<p><b>Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.</b></p>	
<p>Activity 4.2.1: Set up trainings for local stakeholders on alternative biomass utilization, recycling and reuse of waste. Include business opportunities and encourage participation of women.</p>	<p>National training courses/workshop on alternative biomass utilization, carried out on October 18, 2018 at the conference hall of Governor's Office in Darkhan-Uul city, Darkhan-Uul province. More than 40 participants (61% woman of total participants) participated in the workshop such as officers in charge of environment</p>

	pollution, agriculture and industrial issues of main agricultural region of Mongolia. <b>Completed.</b>
Activity 4.2.2: Design educational programs for schools and families on open burning and waste management. Encourage participation of women.	Institute of Chemistry and Chemical Technology of the Mongolian Academy of Sciences have successfully organized the “Open introduction day” on 12 <sup>th</sup> of November. During this event we introduced to the participants activities of the project. About 190 pupils and students from 3 secondary schools and 3 universities in Ulaanbaatar City have been visited our Institute and participated the lecture-presentation “Does waste burning dangerous?”. Guests have understanding and learning of open burning and U-POPs, their negative effects on human health and the environment advocacy and mitigation measures. During the exhibition we delivered leaflets and T-shirts, hats, bags which have slogan “Stop open burning!” to our guests. <b>Completed.</b>
Activity 4.2.3: Develop education curricula at university level focused on BAT/BEP in waste management and benefits of their implementation. Advanced information on incentive systems and financing mechanisms.	<ul style="list-style-type: none"> <li>• The draft of textbook on solid waste management and U-POPs for university students was developed. This will be used for a preparation of guidance materials and education curricula at university level.</li> <li>• Organized meeting with Prof. Ganzorig (Director of Technological University Shine Mongol) and signed cooperation agreement for developing education curricula at the University level.</li> </ul> <b>Ongoing.</b>
<b>OUTCOME 5: ESTABLISHED PROJECT MANAGEMENT STRUCTURE AND THE SYSTEM FOR MONITORING/EVALUATION OF PROJECT IMPACT</b>	
<b>Output 5.2: Project impact monitoring system identified and implemented.</b>	
Activity 5.2.1: Hold project Inception Workshop.	Project inception workshop was organized on Feb,4-5, 2016.
Activity 5.2.2: Measure impact indicators	<b>Ongoing</b>

on an annual basis	
Activity 5.2.3: Prepare Annual Project Reports and Project Implementation Reports	Annual report prepared by NPM and submitted to UNIDO HQ every year.
Activity 5.2.4: Hold annual PET meetings	
Activity 5.2.5: Carry out mid-term external evaluation	
Activity 5.2.6: Carry out annual visits to selected field sites	
Activity 5.2.7: Establish a project management information system (MIS), including project website to disseminate information to stakeholders	
Activity 5.2.8: Carry out final external evaluation	
Activity 5.2.9: Complete Project Terminal Report	
<b>Project costs</b>	
<b>Project management cost</b>	
<b>TOTAL Project costs</b>	

<b>CAMBODIA WORK PLAN 2019</b>												
Demonstration of BATs and BEPs in Open Burning Activities in Response to SC on POPs												
Outputs by Project Component	Year 2019.				Year 2020.							
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4				
<b>Component 1 - Legislation Improvement</b>												
<b>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</b>												
1.1.5 Develop toolkits for waste management, including recommendations for BAT/BEP guidelines update (in English and local languages)												
<b>Component 2 - Institutional Strengthening</b>												
<b>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.</b>												
<b>Output 2.2: Enhanced regional/national institutional capacity through the implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.</b>												
<b>Component 3 - Demonstration Activities on Pilot Sites</b>												
<b>Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.</b>												
Activity 3.1.2: Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites.												
<b>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.</b>												
Conducted survey on recyclable materials market in Phnom Penh Area and the report was submitted to UNIDO												

Business plan and workplan for equipment supply for COMPED																				
The two selected Sangkat (districts) namely OMAL, WATKOR located in the peri urban area of the city for pilot project on implementation of the segregation at source																				
Battambang confirmed the designated Focal Point, Mr. Chek Noy, Chief of Municipal Beautification and Waste Management, Battambang Municipal to UNIDO for the coordination of activities:																				
Signed Cooperative Agreement (CA) between MOE and Battambang to be signed;																				
Cooperative Agreement (CA) for the implementation of materials for the COMPED was prepared by UNIDO expert and sent COMPED and Battambang Municipal was translated and reviewing and feedback;																				
UNIDO will decide whether COMPED could be appointed to be the issuing body for a local bid for the supply and installation of concrete basements and roofing																				
UNIDO has agreed to offers a plastic granulating line 2-4T/day capacity and will check the available budget for having further equipment (blowers) to produce plastic bags suggested by the Plastic Product Company																				
<b>Component 4 – Education and Awareness Raising</b>																				
Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.																				
Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.																				
<b>Component 5 - Monitoring and Evaluation</b>																				
Output 5.1: M&E framework of the project established																				
Output 5.2: Project Impact Monitoring System Identified and Implemented																				

Note: Yellow stated with year from 2017-2018 and blu stated from 2018-2019

ANNEX E1

PROGRESS OF ACTIVITIES

COUNTRY: CAMBODIA

Project Framework	Progress/Remarks
<b>OUTCOME 1: STRENGTHENED LEGISLATIVE CAPACITY FOR INTRODUCING BAT/BEP IN WASTE OPEN BURNING SECTOR</b>	
<b>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.</b>	
Activity 1.1.1: Asses the impacts of common and traditional open burning practices in the region in terms of releases of U-POPs, GHG emissions, and other contaminants, and the effects/benefits of BAT/BEP application.	Assessment Report 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 submitted to UNIDO on 26 February,2018.  <b>Completed</b>
Activity 1.1.2: Formulate and propose legislative changes and updated regulations on waste and landfill management targeting common open burning practices. Specifically address U-POPs and other contaminants, consider enabling establishment of financing mechanisms.	Developed Technical Guideline on Waste and Landfill Management Introducing BAT/BEP in Cambodia. The Final Technical Guideline submitted to UNIDO on 11 <sup>st</sup> October, 2017. <b>Completed</b>

<p>Activity 1.1.3: Develop and introduce financing mechanisms and incentive systems based on the updated legislation in support of BAT/BEP implementation.</p>	<p>Developed Proposed Financing Mechanisms with Economic Instruments and Market-Based Incentive Concepts/ Schemes for Solid Waste Management and Disposal in Cambodia. The final report was submitted to UNIDO on 11<sup>st</sup> October, 2017. <b>Completed</b></p>
<p>Activity 1.1.4: Hold workshops and trainings to raise awareness of the impacts and opportunities of the proposed revised legal framework; discuss and disseminate to all relevant stakeholders (in English and local languages).</p>	<p>A Final Consultation workshop on Technical Guideline on Waste and Landfill Management Introducing BAT/BEP, Financing Mechanisms, Incentive Systems and Manual for Using Financial Mechanism and Incentive System for Waste Management was conducted on 26 December 2017, Phnom Penh. Main objective of the workshop was to present the same to stakeholders. The 33 participants of the workshop were representatives of the Government (Ministries), key officials from Municipality, landfill manager, Academia and NGO.</p> <p><b>Completed</b></p>
<p>Activity 1.1.5: Develop toolkits for waste management, including recommendations for BAT/BEP guidelines update (in English and local languages).</p>	<p>Integrated Solid Waste Management Toolkit to Implement BAT and BEP to Open Burning is developed by international consultant. Translation of the Toolkit in local languages is not started.(need to be financial support from UNIDO for a translation of Toolkit).</p> <p><b>Ongoing</b></p>
<p>Activity 1.1.6: Develop manuals for using financing mechanisms and incentive systems in waste management (in English and local languages).</p>	<p>Developed manuals for using financing mechanisms and incentive systems in waste management .The final report was submitted to UNIDO on 22<sup>nd</sup> November, 2017.</p> <p><b>Completed</b></p>
<p><b>OUTCOME 2: ENHANCED INSTITUTIONAL CAPACITY TO CARRY OUT BAT/BEP IMPLEMENTATION</b></p>	
<p><b>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.</b></p>	
<p>Activity 2.1.1: Establish a web-based regional cooperation platform to specifically address</p>	<p>The project website <a href="http://www.stopopenburning.org">http://www.stopopenburning.org</a> was developed to the regional website.</p>

open burning issues.	<b>Completed</b>
Activity 2.1.2: Carry out targeted trainings for public officers and local authorities involved in waste management, as well as for community stakeholders, aimed to introduce BAT/BEP concepts. Special consideration on gender by encouraging participation of women.	Participated the Regional Training Program on TOT BAT and BEP on Open Burning for Key Stakeholders was organized in Manila Philippines February 28-March 02, 2018, (1) Mr. Soun Ponlork, Vice Chief Office -Department of Hazardous Substance Management, (2) Ms. Ngan Srey Pov, Technical Officer- Department of Solid Waste management, and Mr. Ros Bandos- Deputy Director, Department of Environmental Education. <b>Completed</b>
Activity 2.1.3: Carry out targeted trainings for regional/national/local technical staff on disposal facilities (landfill, open dumpsites) on issues connected with open burning sector and BAT/BEP.	<u>Regional activities</u> <b>Ongoing</b>
Activity 2.1.4. Carry out education and training on application of financing mechanisms and incentive systems in support of BAT/BEP implementation. Special consideration on gender by encouraging participation of women.	
Activity 2.1.5: Introduce standardized methodologies for carrying out inventories of number and types of waste disposal facilities, dumpsites and landfills in the participating countries, and update them continuously.	This inventory activity is done together with Act1.1.1. The NE conducted survey and collected information based on guidelines and checklist for waste dumpsites which was developed and proposed by UNIDO consultant and UNEP toolkits. Thereafter the result of the survey were used as of baseline for 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. <b>Completed</b>

<p><b>Output 2.2: Enhanced regional/national institutional capacity through the implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.</b></p>	
<p>Activity 2.2.1: Strengthen the capability of regional/national laboratories for sampling and analysing UP-POPs, GHG emissions and other contaminants relevant for common landfill management and open burning practices.</p>	<p>The Regional Training of Trainer (TOT) on POPs Analysis and Sampling was organized 20 - 30 November 2017 in Hanoi, Vietnam . Two participants from the Ministry of Environment Laboratory (MOE-LAB), Mr. Siv Kong, Deputy Director and Mrs. Serey Panha, Chief Office were participated</p> <p><b>Completed</b></p>
<p>Activity 2.2.2: Train management personnel in monitoring, evaluating and reporting on U-POPs, GHG emissions and other contaminants released by open burning.</p>	<p>Part of 2.2.1</p>
<p>Activity 2.2.3: Introduce/implement standardized methodologies to continuously update inventories of U-POPs releases from open burning practices.</p>	<p>Unintentionally produced POPs (U-POPs) inventory have been done in 2006 and updated in 2015 in Cambodia.</p>
<p><b>OUTCOME 3: BAT/BEP IMPLEMENTED IN OPEN BURNING SOURCES</b></p>	
<p><b>Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.</b></p>	
<p>Activity 3.1.1: Collect detailed environmental and socio-economic data and formulate impact indicators, and evaluate climate change mitigation/adaptation aspects at</p>	<p><u>Regional activities:</u> International expert; Report shall be circulated for further planning.</p> <p><b>Ongoing</b></p>

<p>the selected demonstration sites. Consider specific local/regional circumstances related to open burning.</p>	
<p>Activity 3.1.2: Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites.</p>	<p>UNIDO – procurement of international expert</p> <p><b>Ongoing</b></p>
<p><b>Output 3.2: BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country.</b></p>	
<p>Activity 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.</p>	<p>UNIDO-Recruitment - assessment of the demonstration site. This activity is planned to be carried out targeting in June 2019 for all the five participating countries.</p> <p><b>Ongoing</b></p>
<p>Activity 3.2.2: Enhance effectiveness of waste collection and segregation, introduce BAT/BEP at the selected dumpsite <b>in Cambodia</b> and promote waste recycling activities. Consider climate change adaptation needs of the site.</p>	<p><b><u>INITIAL PARTNER: Phnom Penh City Hall (PPCH)</u></b></p> <ul style="list-style-type: none"> <li>- Conducted survey on recyclable materials market in Phnom Penh Area and the report was submitted to UNIDO on 26 Feb, 2018.</li> </ul> <p><b>Completed</b></p> <ul style="list-style-type: none"> <li>- Proposed option to improve existing Material Recycling Facility (MRF) by landfill and to have a clean MRF close to landfill entrance to produce grinded and granulated plastics</li> </ul> <p><b><u>NEW PARTNER: Battambang Province</u></b></p> <p><b>The activities have been done and or completed</b></p> <ul style="list-style-type: none"> <li>- UNIDO recruitment for assessment of Battambang province for the demonstration sites;</li> <li>- Proposed options for : Improving composting (COMPED) and</li> </ul>

	<p>plastic recycling activity (Battambang Plastic Products Private Company) were agreed;</p> <ul style="list-style-type: none"> <li>- Business plan and workplan for equipment supply for COMPED;</li> <li>- Co-financing letter of Battambang province received;</li> <li>- The two selected Sangkat (districts) namely OMAL , WATKOR, located in the peri urban area of the city for pilot project on implementation of the segregation at source;</li> <li>- Battambang confirmed the designated Focal Point to UNIDO for the coordination of activities;</li> </ul> <p><b>The activities are ongoing</b></p> <ul style="list-style-type: none"> <li>- UNIDO is about to select the contractor for the supply of new equipments (shredder, revolving, screening machines) for the composting facility and the bidding for the supply of equipment is about to be finalized by UNIDO procurement;</li> <li>- UNIDO will decide whether COMPED could be appointed to be the issuing body for a local bid for the supply and installation of concrete basements and roofing;</li> <li>- UNIDO has agreed to offers a plastic granulating line 2-4T/day capacity and will check the available budget for having further equipment (blowers) to produce plastic bags suggested by the Plastic Product Company;</li> <li>- The Draft Cooperative Agreement (CA) for the implementation of materials for the COMPED was prepared by UNIDO expert and sent COMPED and Battambang Municipal to review and feedback;</li> <li>- Final Draft Cooperative Agreement (CA) between MOE and Battambang to be signed;</li> <li>- A awareness campaign has already been started By DEE and a big event is planned on March 2019, and</li> <li>- Draft Cooperative Agreement (CA) between UNIDO and GGGI</li> </ul>
<p>Activity 3.2.3: Enhance effectiveness of waste selection and segregation, promote waste recycling activities and investigate climate change mitigation/adaptation measures at</p>	<p>For <u>Lao PDR</u></p>

<p>the selected landfill <u>in Lao PDR</u>.</p>	
<p>Activity 3.2.4: Set up the system for reuse of metal drums to collect ashes, and introduce BAT/BEP at the selected dumpsite <u>in Mongolia</u> considering climate change mitigation/adaptation.</p>	<p>For <u>Mongolia</u></p>
<p>Activity 3.2.5: Set up integrated waste management systems including waste recycling, composting facilities and landfill gas utilization plants at selected municipalities and sites <u>in Philippines</u>.</p>	<p>For <u>Philippines</u></p>
<p>Activity 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 <u>in Vietnam</u>.</p>	<p>For <u>Vietnam</u>.</p>
<p>Activity 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.</p>	<p>Not yet to start, this will be happened after the demonstration site</p>
<p>Activity 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.</p>	<p>Not yet to start, this will be happened after the demonstration site</p>

<p><b>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</b></p>	
<p><b>Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.</b></p>	
<p>Activity 4.1.1: Carry out targeted awareness raising campaigns on environmental and health hazards of U-POPs for public officials, professionals, community leaders, farmers and scavengers. Encourage women participation.</p>	<p>Organizing the orientation on open burning for photo and poster contest was organized on 17<sup>th</sup> August, 2016 with total of 100 participants from MOE, Primary Schools, teachers and pupils were attended.</p> <p><b>Completed</b></p> <p>First awareness raising workshop –the photo and poster contest was organized 26<sup>th</sup> September, 2016 with total of 250 participants from MOE, MOEYS, Primary Schools teachers and pupils were attended.</p> <p><b>Completed</b></p> <p>National Youth Debate on Environmental Issues was organized on 20<sup>th</sup> October, 2017 with total of 150 students and lectures from University of Health Science, International University, Svay Rieng University, and Institute of Technology of Cambodia were attended;</p> <p><b>Completed</b></p>
<p>Activity 4.1.2: Develop project website and dissemination materials to share information with stakeholders, also using the established collaboration platform. Include information on business opportunities, incentive systems and financing mechanisms.</p>	<p>The project website <a href="http://www.stopopenburningcam.org">www.stopopenburningcam.org</a> was developed;</p> <p>First set of dissemination materials which link to YouTube to search for materials such as leaflet, poster and video cartoon, reports and photos through:</p>

	<p><a href="https://www.facebook.com/314699302002531/videos/314340019360934/">https://www.facebook.com/314699302002531/videos/314340019360934/</a>.</p> <p>Detailed work plan and report of communication strategy for the whole project implementation were developed;</p> <p><b>Completed</b></p> <p>Public Awareness on National Clean Up Day “Let’s Clean Our House” was organized on 23th November, 2018 with total of 700 people from MOE, DOE, students, teachers, local communities, vendors, factory workers in Phnom Penh were attended.</p> <p><i>MOE budget</i></p>
<p><b>Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.</b></p>	
<p>Activity 4.2.1: Set up trainings for local stakeholders on alternative biomass utilization, recycling and reuse of waste. Include business opportunities and encourage participation of women.</p>	<p>National training course for national and local authorities on health and environmental topics of open burning practices was organized on 25<sup>th</sup> – 27<sup>th</sup> , April, 2018 with total of 115 participants from MOE, relevant ministries, all provincial DOE, Provincial Governors, District Chiefs were participated.</p> <p><i>MOE budget</i></p>
<p>Activity 4.2.2: Design educational programs for schools and families on open burning and waste management. Encourage participation of women.</p>	<p>The Training Workshop on the Effect of Open Burning Practice on Human Health and Environment was organized on 4<sup>th</sup> October, 2017 in Phnom Penh, participated by 50 Students and lectures from University of Health Science, International University, Svay Rieng University, and Institute of Technology of Cambodia;</p> <p><b>Completed</b></p> <p>Training Workshop on Plastic Waste Management was organized on 23<sup>th</sup> -24<sup>th</sup> August, 2017 in Siem Reap province participated by 70</p>

	<p>participants from MOE and Siem Reap Provincial DOE, DAFF, DOEYS, DWA, DLMUPC and Provincial Governor.</p> <p><i>MOE budget</i></p> <p>The workshop on “Effect of Plastic Waste and Reduction” at Prek Khsay Commune was organized on 21<sup>st</sup> – 22<sup>nd</sup> April, 2018</p> <p>in Prey Veng province participated by 300, who are teachers pre-service teachers, and pupils.</p> <p><i>MOE budget</i></p>
<p>Activity 4.2.3: Develop education curricula at university level focused on BAT/BEP in waste management and benefits of their implementation. Advanced information on incentive systems and financing mechanisms.</p>	<p>Sub contract with Curriculum Development expert has been done;</p> <p>First draft of curriculum on BAT/BEP in waste management and incentive/financing system has been developed</p> <p><b>Completed</b></p> <p>Finalizing the curriculum on BAT/BEP in waste management and incentive/financing system</p> <p><b>Ongoing</b></p>
<p><b>OUTCOME 5: ESTABLISHED PROJECT MANAGEMENT STRUCTURE AND THE SYSTEM FOR MONITORING/EVALUATION OF PROJECT IMPACT</b></p>	
<p><b>Output 5.2: Project impact monitoring system identified and implemented.</b></p>	
<p>Activity 5.2.1: Hold project Inception Workshop.</p>	<p>The Regional Project Launching, inception workshop was organized on 18<sup>th</sup> May, 2015 and Project Steering Committee meeting was held on 18<sup>th</sup> – 20<sup>th</sup> May, 2015</p>

Activity 5.2.2: Measure impact indicators on an annual basis	<b>Ongoing</b>
Activity 5.2.3: Prepare Annual Project Reports and Project Implementation Reports	Annual report prepared by NPM and submitted to UNIDO every year.
Activity 5.2.4: Hold annual PET meetings	
Activity 5.2.5: Carry out mid-term external evaluation	
Activity 5.2.6: Carry out annual visits to selected field sites	
Activity 5.2.7: Establish a project management information system (MIS), including project website to disseminate information to stakeholders	
Activity 5.2.8: Carry out final external evaluation	
Activity 5.2.9: Complete Project Terminal Report	
<b>Project costs</b>	
<b>Project management cost</b>	
<b>TOTAL Project costs</b>	

## LAO PDR WORKPLAN 2019-2020

Demonstration of BATs and BEPs in Open Burning Activities in Response to SC on POPs

Outputs by Project Component	Year 2019.				Year 2020.			
	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Quarter 1	Quarter 2	Quarter 3	Quarter 4
<b>Component 1 - Legislation Improvement</b>								
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								
<b>Component 2 - Institutional Strengthening</b>								
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.								
Output 2.2: Enhanced regional/national institutional capacity through the implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.								
<b>Component 3 - Demonstration Activities on Pilot Sites</b>								
Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.								
Output 3.2: BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country								
<b>Component 4 - Education and Awareness Raising</b>								
Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.								
Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.								
<b>Component 5 - Monitoring and Evaluation</b>								
Output 5.1: M&E framework of the project established								
Output 5.2: Project Impact Monitoring System Identified and Implemented								

**ANNEX F1**

**PROGRESS OF ACTIVITIES**

**COUNTRY: Laos**

<b>Project Framework</b>	<b>Progress/Remarks</b>
<b>OUTCOME 1: STRENGTHENED LEGISLATIVE CAPACITY FOR INTRODUCING BAT/BEP IN WASTE OPEN BURNING SECTOR</b>	
<b>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.</b>	
Activity 1.1.1: Asses the impacts of common and traditional open burning practices in the region in terms of releases of U-POPs, GHG emissions, and other contaminants, and the effects/benefits of BAT/BEP application.	National Expert submitted final report of the Health and Environmental Impacts of Common and Traditional Open Burning Practices to the UNIDO - Date of Submission of report to UNIDO - June 11, 2017. Local Expert: Ms. Xaysomphone Souvannavong- Completed.
Activity 1.1.2: Formulate and propose legislative changes and updated regulations on waste and landfill management targeting common open burning practices. Specifically address U-POPs and other contaminants, consider enabling establishment of financing mechanisms.	Activities 1.1.2; 1.1.3, 1.1.4 & 1.1.6 - Laos C1: Technical Guideline on Waste and Landfill Management Introducing BAT/BEP in Lao People's Democratic Republic. National expert: Mr. Phengkhamla Phonvisai. Date of submission the report October 10 2017 – Completed.
Activity 1.1.3: Develop and introduce financing mechanisms and incentive systems based on the updated legislation in support of BAT/BEP implementation.	

<p>Activity 1.1.4: Hold workshops and trainings to raise awareness of the impacts and opportunities of the proposed revised legal framework; discuss and disseminate to all relevant stakeholders (in English and local languages).</p>	
<p>Activity 1.1.5: Develop toolkits for waste management, including recommendations for BAT/BEP guidelines update (in English and local languages).</p>	
<p>Activity 1.1.6: Develop manuals for using financing mechanisms and incentive systems in waste management (in English and local languages).</p>	
<p><b>OUTCOME 2: ENHANCED INSTITUTIONAL CAPACITY TO CARRY OUT BAT/BEP IMPLEMENTATION</b></p>	
<p><b>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.</b></p>	
<p>Activity 2.1.1: Establish a web-based regional cooperation platform to specifically address open burning issues.</p>	<p>The project website has been developed based on the Joomla platform; <a href="http://www.stopopenburninglaos.org/">http://www.stopopenburninglaos.org/</a> Completed.</p>
<p>Activity 2.1.2: Carry out targeted trainings for public officers and local authorities involved in waste management, as well as for community stakeholders, aimed to introduce BAT/BEP concepts. Special consideration on gender by encouraging participation of women.</p>	<p>- Joined the regional training on ToT BAT and BEP on Open Burning in Manila Philippines 28.Feb.2018-02.March.2018. @Professor. Korakanh Pasomsouk - Department of Engineering, National University of Laos, Mr. Sonethavy Phimmansane – Head of Solid waste magement office -VUDAA</p>

<p>Activity 2.1.3: Carry out targeted trainings for regional/national/local technical staff on disposal facilities (landfill, open dumpsites) on issues connected with open burning sector and BAT/BEP.</p>	
<p>Activity 2.1.4. Carry out education and training on application of financing mechanisms and incentive systems in support of BAT/BEP implementation. Special consideration on gender by encouraging participation of women.</p>	
<p>Activity 2.1.5: Introduce standardized methodologies for carrying out inventories of number and types of waste disposal facilities, dumpsites and landfills in the participating countries, and update them continuously.</p>	<p>- Guidelines and checklist for the collection of information on waste dumpsites had been developed and proposed by UNIDO consultant and UNEP toolkits. Based on the guideline and checklist, the national consultant collected information and conducted studies of dumping site in Vientiane, Louanggprabang and Saiyabuly landfill sites to study the characteristics of dumping sites and recycling systems. Results of the inventory and field survey were included the Report of "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" <b>Completed.</b></p>
<p><b>Output 2.2: Enhanced regional/national institutional capacity through the implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.</b></p>	
<p>Activity 2.2.1: Strengthen the capability of regional/national laboratories for sampling and analyzing UP-POPs, GHG emissions and other contaminants relevant for common landfill management and open burning practices.</p>	<p>- 2 participants from National laboratory, MONRE joined the regional training of Trainer on POPs analysis and sampling in Hanoi Vietnam, 20 – 30<sup>th</sup> November 2017.</p>
<p>Activity 2.2.2: Train management personnel in monitoring, evaluating and reporting on U-POPs, GHG emissions and other contaminants released by open burning.</p>	<p>Part of 2.2.1</p>

<p>Activity 2.2.3: Introduce/implement standardized methodologies to continuously update inventories of U-POPs releases from open burning practices.</p>	
<p><b>OUTCOME 3: BAT/BEP IMPLEMENTED IN OPEN BURNING SOURCES</b></p>	
<p><b>Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.</b></p>	
<p>Activity 3.1.1: Collect detailed environmental and socio-economic data and formulate impact indicators, and evaluate climate change mitigation/adaptation aspects at the selected demonstration sites. Consider specific local/regional circumstances related to open burning.</p>	<p><b>Regional activity - Ongoing.</b></p>
<p>Activity 3.1.2: Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites.</p>	<p><b>UNIDO recruitment of international expert – On going.</b></p>
<p><b>Output 3.2: BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country.</b></p>	
<p>Activity 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.</p>	<p><b>UNIDO recruitment for assessment of demonstration sites - Ongoing.</b></p>
<p>Activity 3.2.2: Enhance effectiveness of waste collection and segregation, introduce BAT/BEP at the selected site in Cambodia and promote waste recycling activities. Consider climate change adaptation needs of the site.</p>	<p>- On going</p>

<p>Activity 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.</p>	<ul style="list-style-type: none"> <li>- UNIDO recruitment for assessment of demonstration sites – SAPLAST and Thakek disposal site.</li> <li>- TOR for plastic pipes production equipment; plastic washing and plastic extrusion lines for SAPLAST factory in Vientiane was developed and completed. The bidding had been carried out and evaluation of bidding tenders are being evaluated - <b>Ongoing</b>.</li> <li>- TOR for material recovery facility of waste material at the Thakek dumping site is being prepared by UNIDO expert and shall be sent to Thakek district and UDAA for review – <b>On going</b>.</li> </ul>
<p>Activity 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 mitigation/adaptation.</p>	
<p>Activity 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.</p>	
<p>Activity 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.</p>	
<p>Activity 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.</p>	<p>- <b>Regional activity</b></p>
<p>Activity 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.</p>	<p>- <b>Regional activity</b></p>
<p><b>OUTCOME 4: IMPROVED KNOWLEDGE AND UNDERSTANDING ON BAT/BEP AND ON RISKS CONNECTED WITH U-POPs, GHG EMISSIONS AND OTHER CONTAMINANTS RELEASED</b></p>	

<b>THROUGH OPEN BURNING</b>	
<b>Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.</b>	
<p>Activity 4.1.1: Carry out targeted awareness raising campaigns on environmental and health hazards of U-POPs for public officials, professionals, community leaders, farmers and scavengers. Encourage women participation.</p>	<p>The 1st Awareness raising campaign on the environmental and health hazards of U-POPs was integrated with the inception workshop. More than 50 people participated in the workshop. The workshop organized in 25th September 2016. <b>Completed.</b></p>
<p>Activity 4.1.2: Develop project website and dissemination materials to share information with stakeholders, also using the established collaboration platform. Include information on business opportunities, incentive systems and financing mechanisms.</p>	<ul style="list-style-type: none"> <li>- <b>Poster and photo contests</b> - Organized national poster and regional photo contests. The competitions are nationwide and various channels of communication have been using to announce the contests including newspapers in both local and English languages, project website, Facebook, education departments at the central and provincial levels. Mr. Chanthachak Louanglath has won the regional 1st prize and had been invited to the recognition of the photo contest in Vienna in October 2017 for formal winning the Regional Photo Contest. Completed.</li> <li>- <b>Short Video</b> - Short video of open burning impacts on health in local language and English have been produced and posted into YouTube. The names <b><i>stopopenburninglao and stopopenburningenglish.</i></b> Completed.</li> <li>- More than 2000 of awareness raising material including posters, pamphlet, hats and shirts on stop open burning have been produced and distributed.</li> <li>- <b>Website</b> - The project website developed in local and English. <a href="http://www.stopopenburninglaos.org/">http://www.stopopenburninglaos.org/</a> . Completed and being continuously updated.</li> <li>- <b>Tree planting</b> - Organized the first tree planting activity with ministry of science and technology in 1st June 2016 (Celebration of International environment day) more than 300 people joined the event. The second awareness raising activity on tree planting was jointly organized with Sithaxay primary and secondary school in Bolokhamxay province during the international environmental day, June 31<sup>st</sup> 2018. More than About 150 students and teachers joined the event.</li> <li>- Awareness raising activity on stop open burning and impacts of waste material on environment at That Luang Festival or BOUN THAT LUANG FESTIVAL, where selected of drawing pictures from the drawing contest and printing material under the project were</li> </ul>

	exhibited at the festival for three days from November 2nd to 5th 2017. The activity was co-organized with National university in November 2017.
<b>Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.</b>	
Activity 4.2.1: Set up trainings for local stakeholders on alternative biomass utilization, recycling and reuse of waste. Include business opportunities and encourage participation of women.	<ul style="list-style-type: none"> <li>- Organized the workshop with the aims to raise awareness of the public on impacts of Open burning activity related to POPs on Environment and Human Health. The workshop was organized in May 11<sup>st</sup> 2018 at the Settha Palace Hotel. About 60 participants from various organizations and solid waste collector's companies, national university invited to join the workshop</li> <li>- The workshop on Waste Material and Alternative Biomass Utilization workshop was organized in 14-15<sup>th</sup> September 2017 at the Department of Mechanical Engineering, National University of Laos, Vientiane capital. About 68 participants from various organizations and solid waste collector's companies, national university invited to join the workshop.</li> <li>- Organized the workshop on integrated waste management for Managers of Waste Disposal and Enterprises involves in Waste Collection in August 17, 2018. More than 60 people from various organizations and solid waste collector's companies, national university invited to join the workshop.</li> <li>- Carried out an awareness raising workshop on integrated management of waste material and health hazards of U-POPs, Thakek, Khammouan Province Friday 20th September 2018. The half day workshop was carried out back to back during the UNIDO expert, Mr. Massimo Gobbi visited the demonstration site, city of Thakekration. About 80 people joined the workshop.</li> </ul>
Activity 4.2.2: Design educational programs for schools and families on open burning and waste management. Encourage participation of women	<ul style="list-style-type: none"> <li>- Planning to organize in 2019.</li> </ul>
Activity 4.2.3: Develop education curricula at university level focused on BAT/BEP in waste management and benefits of their implementation. Advanced information on incentive systems and financing	<ul style="list-style-type: none"> <li>- The Department of Mechanical Engineering, at the National University of Laos has been contracted as a counterpart to develop educational curricula at the university. The curriculum or the course syllabus, "Municipal Solid Waste and Organic Pollutant" has been developed and adopted by the department. The</li> </ul>

mechanisms.	course with 2 credits has been introduced in the teaching program since 2018 as part of a bachelor's degree. The course covers various topics on solid waste management, international conventions including the Stockholm convention, and persistent organic pollutants.
<b>OUTCOME 5: ESTABLISHED PROJECT MANAGEMENT STRUCTURE AND THE SYSTEM FOR MONITORING/EVALUATION OF PROJECT IMPACT</b>	
<b>Output 5.2: Project impact monitoring system identified and implemented.</b>	
Activity 5.2.1: Hold project Inception Workshop.	- Project inception workshop was organized in 25th September 2016.
Activity 5.2.2: Measure impact indicators on an annual basis	- Ongoing
Activity 5.2.3: Prepare Annual Project Reports and Project Implementation Reports	- Report prepared by NPM and submitted to UNIDO HQ every year.
Activity 5.2.4: Hold annual PET meetings	
Activity 5.2.5: Carry out mid-term external evaluation	
Activity 5.2.6: Carry out annual visits to selected field sites	
Activity 5.2.7: Establish a project management information system (MIS), including project website to disseminate information to stakeholders	
Activity 5.2.8: Carry out final external evaluation	
Activity 5.2.9: Complete Project Terminal Report	
<b>Project costs</b>	
<b>Project management cost</b>	
<b>TOTAL Project costs</b>	

ANNEX G

# WORK-PLAN 2019

Activity	Plan in 2019				Consultant/Responsibility party
	Q1	Q2	Q3	Q4	
<b>Component 1</b>					
Act. 1.1.2b. Develop technical guideline on retrieval and disposal of discarded products to support the implementation of the Circular 34/2017/TT-BTNMT on retrieval and disposal of discarded products					Dr. Le Thu Hoa/ Department of Waste Management
Act. 1.1.3 Develop and introduce financing mechanisms and incentive systems based on the updated legislation in support of BAT/BEP implementation.					
Act. 1.1.4 Hold workshops and trainings to raise awareness of the impacts and opportunities of the proposed revised legal framework					
Act. 1.1.6 Develop manuals for using financing mechanisms and incentive systems in waste management					

ANNEX G

# WORK-PLAN 2019

Activity	Plan in 2019				Consultant/Responsibility party
	Q1	Q2	Q3	Q4	
<b>Component 2</b>					
Act. 2.1.2 Carry out targeted trainings for public officers and local authorities involved in waste management, as well as for community stakeholders, aimed to introduce BAT/BEP concepts. Special consideration on gender by encouraging participation of women.					The PMU coordinates with the Department of Environmental Quality Management
Act. 2.1.3 Carry out targeted trainings for regional/national/local technical staff on disposal facilities (landfill, open dumpsites) on issues connected with open burning sector and BAT/BEP.					The PMU coordinates with the Department of Waste Management
Act. 2.1.4 Carry out education and training on application of financing mechanisms and incentive systems in support of BAT/BEP implementation. Special consideration on gender by encouraging participation of women					The PMU coordinates with the Department of Waste Management
Act. 2.1.5 Introduce standardized methodologies for carrying out inventories of number and types of waste disposal facilities, dumpsites and landfills in the participating countries, and update them continuously					Dr. Nguyen Duc Quang/ Department of Waste Management

## ANNEX G

**WORK-PLAN 2019**

Activity	Plan in 2019				Consultant/Responsibility party
	Q1	Q2	Q3	Q4	
<b>Component 3</b>					
Act. 3.1.1 Collect detailed environmental and socio-economic data and formulate impact indicators, and evaluate climate change mitigation/adaptation aspects at the selected demonstration sites. Consider specific local/regional circumstances related to open burning					
Act. 3.1.1 Collect detailed environmental and socio-economic data and formulate impact indicators, and evaluate climate change mitigation/adaptation aspects at the selected demonstration sites. Consider specific local/regional circumstances related to open burning					
Act. 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					Regional activity
Act. 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					JV of VNCPC, Viet Trung and Vinacolour

ANNEX G

# WORK-PLAN 2019

Activity	Plan in 2019				Consultant
	Q1	Q2	Q3	Q4	
<b>Component 4</b> Act. 4.1.2 Develop project website and dissemination materials to share information with stakeholders, also using the established collaboration platform.					CNREC
<b>Component 5</b> Act. 5.2.3: Prepare Annual Project Reports and Project Implementation Reports.					

**ANNEX G1**

**PROGRESS OF ACTIVITIES**

**COUNTRY: Vietnam**

Project Framework	Progress/Remarks
<p><b>OUTCOME 1: STRENGTHENED LEGISLATIVE CAPACITY FOR INTRODUCING BAT/BEP IN WASTE OPEN BURNING SECTOR</b></p>	
<p><b>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.</b></p>	
<p>Activity 1.1.1: Asses the impacts of common and traditional open burning practices in the region in terms of releases of U-POPs, GHG emissions, and other contaminants, and the effects/benefits of BAT/BEP application.</p>	<p>The final report, which focused on waste treatment activities in industrial sector, domestic waste and waste in rural areas, was submitted to UNIDO and international consultant for review and approval on February 10, 2017. The contents of the report include information on:</p> <ul style="list-style-type: none"> <li>• Status of generation, collection and treatment of solid waste in Vietnam; Estimation of amount of waste disposal in an uncontrolled manner;</li> <li>• The emissions estimation from open burning activities;</li> <li>• Climate change and Greenhouse Gas (GHG) emissions;</li> <li>• Environmental health and citizen awareness in environmental health hot spots; and</li> <li>• Evaluate the potential benefit on the application of BAT/BEP to craft village in term of reduction of potential contaminants</li> </ul> <p><b>Completed</b></p>

<p>Activity 1.1.2: Formulate and propose legislative changes and updated regulations on waste and landfill management targeting common open burning practices. Specifically address U-POPs and other contaminants, consider enabling establishment of financing mechanisms.</p>	<p>Activity 1.1.2a:</p> <p>Department of Environmental Quality Management, VEA is responsible agency.</p> <p>The Consultant has (i) reviewed current situation and issue analysis, (ii) developed technical guidance for development of environmental protection scheme and (iii) provided recommendations for accordant legal regulations for four types of craft villages, including metal recycling, paper recycling, plastic recycling and bamboo mat crafting.</p> <p>Four technical guidelines were completely developed in corresponding with the four types of craft villages. The technical guidance is expected to support for the implementation of the Decree 19/2015/ND-CP of the Government (guiding to implement several Article of Laws on Environmental Protection, including general regulation on environmental protection of craft villages) and the Circular 31/2016/TT-BTNMT on environmental protection of industrial clusters, concentrate businesses, service providers, craft villages, production, commercial and service establishments.</p> <p>The PMU has coordinated with the Consultant to organize the technical consultation meeting on August 23, 2018 to collect comments from senior expert in craft villages and waste management for finalization of the Technical guideline. The final report, including 4 separated technical guidelines, was submitted to UNIDO for approval on October 08, 2018.</p> <p><b>Completed</b></p> <p>Activity 1.1.2b:</p> <p>Department of Waste Management, VEA is responsible agency.</p> <ul style="list-style-type: none"> <li>- Review and amend the National technical regulation on industrial waste incinerators (QCVN 30:2012/BTNMT), in which Dioxin/Furan</li> </ul>

	<p>is requested to monitor as other parameters <b>_Completed</b></p> <ul style="list-style-type: none"> <li>- Develop technical guideline on retrieval and disposal of discarded products in order to support the implementation the Circular 34/2017/TT-BTNMT on the retrieval and disposal of discarded products;</li> </ul> <p>Final report has submitted to the PMU on March 8, 2019. PMU will coordinate with the Department of Waste Management to review before submitting to UNIDO.</p> <p><b>90%</b></p>
<p>Activity 1.1.3: Develop and introduce financing mechanisms and incentive systems based on the updated legislation in support of BAT/BEP implementation.</p>	<p>Department of Waste Management, VEA is responsible agency.</p> <p>Study the current economic instruments for environmental management and waste management; and propose financial model for productive households at craft villages. A loan model was proposed, which is under the control of Provincial People Committee, operated by the commune Agribank transaction office and supervised by DONRE.</p> <p>Final report has submitted to the PMU on March 8, 2019. PMU will coordinate with the Department of Waste Management to review before submitting to UNIDO.</p> <p><b>90%</b></p>
<p>Activity 1.1.4: Hold workshops and trainings to raise awareness of the impacts and opportunities of the proposed revised legal framework; discuss and disseminate to all relevant stakeholders (in English and local languages).</p>	<p>Department of Waste Management, VEA is responsible agency.</p> <p>The program of the workshop was developed to introduce guidance on new regulations on waste management, financing mechanisms and incentive systems to support BAT/BEP implementation and</p>

	difficulties and obstacles in the implementation;  <b>On going</b>
Activity 1.1.5: Develop toolkits for waste management, including recommendations for BAT/BEP guidelines update (in English and local languages).	Regional activity
Activity 1.1.6: Develop manuals for using financing mechanisms and incentive systems in waste management (in English and local languages).	Department of Waste Management, VEA is responsible agency.  Combined with Act. 1.1.3 on development of financing mechanism and incentive systems.  <b>On going</b>
<b>OUTCOME 2: ENHANCED INSTITUTIONAL CAPACITY TO CARRY OUT BAT/BEP IMPLEMENTATION</b>	
<b>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.</b>	
Activity 2.1.1: Establish a web-based regional cooperation platform to specifically address open burning issues.	Regional activity
Activity 2.1.2: Carry out targeted trainings for public officers and local authorities involved in waste management, as well as for community stakeholders, aimed to introduce BAT/BEP concepts. Special	<ul style="list-style-type: none"> <li>Regional Training Program on ToT BAT and BEP on Open Burning for Key Stakeholders developed. The Regional workshop (ToT) was organized in Manila Philippines Feb 28-March 02, 2018. Mr. Nguyen Nhu Trung (Officer of Department of Waste Management, VEA,</li> </ul>

<p>consideration on gender by encouraging participation of women.</p>	<p>MONRE), Ms. Trinh Thi Tham (Lecturer of Hanoi University of Natural Resources and Environment) and Ms. Hoang Thi Dieu Linh (NPM) were participated the Regional workshop (ToT).</p> <ul style="list-style-type: none"> <li>• The program of national training called “Introduction of BAT/BEP concepts for public officers and local authorities and community stakeholders involved in waste management to reduce open burning activities” has developed. The TOR of the training is under revision according comments of the UNIDO.</li> <li>• The PMU coordinates with the Department of Environmental Quality Management to implement the national training;</li> </ul> <p>• <b>On going</b></p>
<p>Activity 2.1.3: Carry out targeted trainings for regional/national/local technical staff on disposal facilities (landfill, open dumpsites) on issues connected with open burning sector and BAT/BEP.</p>	<p>Department of Waste Management, VEA is responsible agency.</p> <p>Plan to combine in one back to back workshop in Q2/2019;</p>
<p>Activity 2.1.4. Carry out education and training on application of financing mechanisms and incentive systems in support of BAT/BEP implementation. Special consideration on gender by encouraging participation of women.</p>	
<p>Activity 2.1.5: Introduce standardized methodologies for carrying out inventories of number and types of waste disposal facilities, dumpsites and landfills in the participating countries, and update them continuously.</p>	<ul style="list-style-type: none"> <li>• Reviewed policy, regulation and strategy on municipal solid waste management (MSWM) in Vietnam.</li> <li>• Conducted the field trip at 09 dumping and landfill sites in the Northern part of Vietnam.</li> <li>• Collected inventory data of waste treatment plants, dumping and landfill sites, including general information, waste/biomass disposal information, site description, pollution situation and study of surroundings of 625 landfills, 162 landfill and incinerators, 37 micro-bio fertilizers, 136 HW treatment facilities;</li> </ul> <p>Final report has submitted to the PMU on March 8, 2019. PMU will coordinate with the Department of Waste Management to review before submitting to</p>

	UNIDO.  <b>90%</b>
<b>Output 2.2: Enhanced regional/national institutional capacity through the implementation of standardized analytical procedures, data collection, monitoring and reporting procedures and facilities.</b>	
Activity 2.2.1: Strengthen the capability of regional/national laboratories for sampling and analysing UP-POPs, GHG emissions and other contaminants relevant for common landfill management and open burning practices.	<p>The regional training was organized by the Dioxin lab, Centre of Environmental Monitoring: 10 technicians from 5 countries were trained on sampling, analyzing and monitoring UPOPs and GHGs;</p> <p>Two researchers from Vietnam has participated the training:</p> <ol style="list-style-type: none"> <li>1. Mr. Phan Dinh Quang, Research Centre for Environment Technology and Sustainable Development;</li> <li>2. Ms. Bui Thi Phuong, Faculty of Environment, Hanoi University of Natural Resources and Environment;</li> </ol> <p><b>Completed</b></p>
Activity 2.2.2: Train management personnel in monitoring, evaluating and reporting on U-POPs, GHG emissions and other contaminants released by open burning.	Part of 2.2.1
Activity 2.2.3: Introduce/implement standardized methodologies to continuously update inventories of U-POPs releases from open burning	

practices.	
<b>OUTCOME 3: BAT/BEP IMPLEMENTED IN OPEN BURNING SOURCES</b>	
<b>Output 3.1: Updated comprehensive assessment of the effects of current practices and impact indicators at the selected demonstration sites.</b>	
Activity 3.1.1: Collect detailed environmental and socio-economic data and formulate impact indicators, and evaluate climate change mitigation/adaptation aspects at the selected demonstration sites. Consider specific local/regional circumstances related to open burning.	Regional activity
Activity 3.1.2: Carry out preliminary monitoring campaigns for U-POPs, GHG emissions and other relevant contaminants released through current practices at the selected demonstration sites.	Regional activity
<b>Output 3.2: BAT/BEP plans developed and implemented at the selected demonstration sites in each participating country.</b>	
Activity 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.	
Activity 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.	
Activity 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.	
Activity 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 mitigation/adaptation.	
Activity 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.	
Activity 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.	<ul style="list-style-type: none"> <li>• Provide services and equipment for two plastic recycling craft villages (Phan Boi and Minh Khai), including 01 new plastic production line 10tpd, 01 improved plastic line 2tpd and 01 recycling plastic discards line 2t/h;</li> <li>• The PMU has coordinated with International Consultant to organize Inception meeting on Nov. 06, 2019;</li> <li>• The PMU has coordinated with local authority to organize consultation meeting on Dec. 04, 2019;</li> <li>• Inception Report submitted;</li> <li>• The outstanding issues in Letter on January 25, 2019 of PMU have not been agreed.</li> <li>• Discussion on the outstanding issues need to be carried out;</li> </ul>
Activity 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	<b>Not started !</b>

disseminate the results.	
Activity 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.	<b>Not started !</b>
<b>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</b>	
<b>Output 4.1: Awareness raising campaigns aimed to emphasize health and environment hazards of open burning practices, carried out on targeted relevant stakeholders.</b>	
Activity 4.1:1: Carry out targeted awareness raising campaigns on environmental and health hazards of U-POPs for public officials, professionals, community leaders, farmers and scavengers. Encourage women participation.	<ul style="list-style-type: none"> <li>• The 1st Awareness raising campaign on the environmental and health hazards of U-POPs combined with the National Inception Workshop, in Lao Cai province was organized on June 4, 2018-160 participants _ <b>Completed</b>;</li> <li>• The 1st national awareness raising event: Photo and Poster making Contests _ 2163 posters and 358 photos on November 22, 2016 _ <b>Completed</b>;</li> <li>• The 2nd Awareness raising campaign on the environmental and health hazards of open burning for the general public and local NGOs, in Ba Ria Vung Tau province on June 05, 2017: 01 Awareness raising workshop _ 116 participants and 01 Cycling event _ 158 participants _ <b>Completed</b></li> <li>• The 2nd Awareness raising event - Running event namely "Green Vietnam Journey", in Hoa Binh province on September 23, 2017_500 participants _ <b>Completed</b></li> </ul>

<p>Activity 4.1.2: Develop project website and dissemination materials to share information with stakeholders, also using the established collaboration platform. Include information on business opportunities, incentive systems and financing mechanisms.</p>	<ul style="list-style-type: none"> <li>• The project website ‘<a href="http://stopopenburningvietnam.org/">http://stopopenburningvietnam.org/</a>’ was developed in Vietnamese and English, linked to the regional website. <b>Completed.</b> .01 animation promote 5R “For a world of zero waste” was developed _ <b>80%</b></li> <li>• 01 paper fan on open burning activities and BAT/BEP application _ <b>90%</b></li> <li>• 01 brochure on project’s activities _ <b>80%</b></li> <li>• 01 video documentary on “Stop open burning _ I can do, you can do too” _ <b>80%</b> After completion, the dissemination materials will be posted on the project website, the CNREC’s website and fanpage, as well as delivered to other relevant workshop/training activities;</li> </ul>
<p><b>Output 4.2: Educational programs aimed at introducing and promoting alternatives to open burning practices, carried out on targeted groups at several levels.</b></p>	
<p>Activity 4.2.1: Set up trainings for local stakeholders on alternative biomass utilization, recycling and reuse of waste. Include business opportunities and encourage participation of women.</p>	<p>Workshop on Solutions for biomass utilization to reduce open burning activities in Hanoi on November 23, 2017, with <b>_75 participants</b> from MONRE, MARD, local DONREs, local DOSTs, local DARDs, and socio-political organizations such as National Center for Agricultural Extension, Vietnam Farmers' Association, Women's Union, Farmer's Association, Youth Union, local Agricultural cooperatives, local Farmers Associations, NGOs and mass media;</p> <p><b>Completed</b></p>
<p>Activity 4.2.2: Design educational programs for schools and families on open burning and waste management.</p>	<p>National training course for national and local authorities on impacts of open burning activities on human health and Environment in Quang Nam province on September 16-17, 2016_82 participants from</p>

<p>Encourage participation of women.</p>	<p>MONRE, local DONREs, local Department of Health, local People Committee, Research Center and Universities, enterprises and mass media;</p> <p><b>Completed</b></p> <hr/> <p>Technical workshop on Integrated waste management and solutions to reduce open burning activities in Hanoi on July 25, 2018_89 participants from the Divisions of Natural Resources and Environment at district level, technical staff of enterprises specializing in waste management and treatment, universities, social organizations and reporters</p> <p><b>Completed</b></p>
<p>Activity 4.2.3: Develop education curricula at university level focused on BAT/BEP in waste management and benefits of their implementation. Advanced information on incentive systems and financing mechanisms.</p>	<ul style="list-style-type: none"> <li>• MOU signed between the PMU, CNREC and Faculty of Environment, Hanoi University of Natural Resources and Environment;</li> <li>• Organized Education Curricula at University level on Waste Management and Reduction of Open Burning Activities in September 2018 – 119 students from 4 universities in Hanoi;</li> <li>• Set of lectures on “Waste management and reduction of open burning activity” developed for environmental students.</li> </ul> <p><b>Completed</b></p>
<p><b>OUTCOME 5: ESTABLISHED PROJECT MANAGEMENT STRUCTURE AND THE SYSTEM FOR MONITORING/EVALUATION OF PROJECT IMPACT</b></p>	
<p><b>Output 5.2: Project impact monitoring system identified and implemented.</b></p>	
<p>Activity 5.2.1: Hold project Inception Workshop.</p>	<p>Project inception workshop was organized on June 4, 2016.</p>

Activity 5.2.2: Measure impact indicators on an annual basis	
Activity 5.2.3: Prepare Annual Project Reports and Project Implementation Reports	Prepared and submitted quarterly, annually reports according requirements of UNIDO and Vietnamese government.
Activity 5.2.4: Hold annual PET meetings	
Activity 5.2.5: Carry out mid-term external evaluation	Mid-term evaluation was conducted in Vietnam on November 22-26, 2018.
Activity 5.2.6: Carry out annual visits to selected field sites	Conducted site visits at total 12 craft villages in 6 provinces, from North to South of Vietnam to select the demonstration sites, from October 2016-April 2017
Activity 5.2.7: Establish a project management information system (MIS), including project website to disseminate information to stakeholders	
Activity 5.2.8: Carry out final external evaluation	
Activity 5.2.9: Complete Project Terminal Report	
<b>Project costs</b>	
<b>Project management cost</b>	
<b>TOTAL Project costs</b>	