

Facilitating Cleaner and Energy Efficient Phosphate Chemicals Industry in China (PhosChemEE) Project

Review CEO Endorsement and Make a recommendation

Basic project information

GEF ID

10722

Countries

China

Project Name

Facilitating Cleaner and Energy Efficient Phosphate Chemicals Industry in China (PhosChemEE) Project

Agencies

UNDP

Date received by PM

12/11/2021

Review completed by PM

1/20/2022

Program Manager

Ming Yang

Focal Area

Climate Change

Project Type

PIF ☐

CEO Endorsement ☐

Part I ? Project Information

Focal area elements

1. Does the project remain aligned with the relevant GEF focal area elements as presented in PIF (as indicated in table A)?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, the project remain aligned with the GEF CCM focal area elements as presented in PIF.

1/26/2022 MY:

Please address the following comments from the GEF PPO:

1. Budget table:

(i) M&E is budgeted separately in the budget table (\$200,000) but included under PMC in table B of the Portal entry (\$444,923) ? in this context, M&E is a separate component outside PMC, so the activities related to M&E are charged to the M&E column accordingly. Please amend it accordingly.

(ii) The activities related with Monitoring all risks, Monitoring of stakeholder engagement plan and Monitoring of gender action are wrongly charged to PMC ? these have to be charged to M&E.

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (US\$eq.)						Total (US\$eq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]
		Component 1	Component 2	Component 3	Sub-Total	M&E	PMC		
Contractual services-individual	Contractual Services: USD75,000 USD 6,000/ya *5 (Monitoring all risks USD3,000/ya, Monitoring of stakeholder engagement plan USD 1,500/ya, Monitoring of gender action plan USD 1,500/ya), 1,000/ya*1+11,000*4 for project management office.						45,000	45,000	MIT

- (iii) International consultants are budgeted to get paid with \$35,000 but there is no any explanation about the tasks / deliverables for these consultants ? please clarify it.

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (US\$eq.)						Total (US\$eq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]
		Component 1	Component 2	Component 3	Sub-Total	M&E	PMC		
International Consultants	International consultants: USD 35,000 (including professional fees, travel expenses and DS A) for 50 working days at USD 700 per working day (multiple activities could be conducted by one consultant) 50 working days in total for activity 1.1.1.2 under Output 1.1.1.	35,000			35,000			35,000	MNR

- (iv) Local Consultants will be paid \$20,000 for activities related with Project Management, but they are charged to M&E ? they need to be charged to PMC. Also, the same budget line talks about \$50,000, but only \$10,000 are charged to the sources (in this case, M&E) ? please amend it.

ANNEX E: Project Budget Table

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		Component 1	Component 2	Component 3	Sub-Total	M&E	PMC		
Local Consultants	Local consultants: USD 50,000: (USD 20000 for project management; USD 2,000/ya*5+ USD 10,000 (M&E) for Monitoring of social and environmental safeguard screening; USD 500/day * 40 = USD 20,000 for mid-term review (M&E)					10,000		10,000	MNR

- (V) Local consultants will be paid \$200,000 but there is no any explanation about the tasks / deliverables for these consultants ? please clarify it.

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (USDeq.)						Total (USDeq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]
		Component 1	Component 2	Component 3	Sub-Total	M&E	PMC		
Local Consultants	Local consultants: USD 200,000 (including professional fees, travel expenses and DSA) for 400 working days at USD 500 per working day (multiple activities could be conducted by one consultant)	200,000			200,000			200,000	MNR

(vi) Local consultants for Monitoring and Evaluation / Terminal Evaluation are charged to PMC ? they must be charged to M&E ? please amend it.

ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description	Component (USDeq.)						Total (USDeq.)	Responsible Entity (Executing Entity receiving funds from the GEF Agency)[1]
		Component 1	Component 2	Component 3	Sub-Total	M&E	PMC		
Local Consultants	Local consultants: USD 50,000; (USD 20,000 for project management, USD 2,000/ya*5= USD 10,000 (M&E) for Monitoring of social and environmental safeguard screening, USD 500/day * 40 = USD 20,000 for mid-term review (M&E))						20,000	20,000	MNR
Local Consultants	Local consultants: USD 55,000 USD 20,000 will be paid in Year 5 for Terminal Evaluation (M&E); USD 6,000/ya *4=11,000 0*1 =35,000 for project management office						35,000	35,000	MIIT


2. Status of Utilization of Project Preparation Grant (PPG): in this section it is requested to provide *detailed* funding amount of the PPG activities financing status ? however, such details are not presented in the table (see screenshot below) ? please amend it.

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: US\$ 200,000			
Project Preparation Activities	GETF/LDCF/SCCF Amount (\$)		
	Budgeted Amount (US\$)	Amount Spent To date (US\$)	Amount Committed (US\$)
Design and development of the UNDP-GEF project: Facilitating Cleaner and Energy Efficient Phosphate Chemicals Industry in China (PhosChemEE) Project	200,000	62,000	138,000
Total	200,000	62,000	138,000

3. While the budget table shows that several components will be financially managed by the Ministry of Natural Resources, the Executing Partners in Project Information and section 6 (Institutional Arrangements and Coordination) only show the Ministry of Industry and Information Technology as the entity responsible for the project's execution ? please amend it in both sections (Project Information and Institutional Arrangements and Coordination).

CEO Endorsement (CEO) entry – Full Sized Project – GEF - 7

Part I: Project Information 

GEF ID 10722		Project Type FSP	
Type of Trust Fund GET	CBIT/NGI CBIT No	NGI No	Project Title ⓘ Facilitating Cleaner and Energy Efficient Phosphate Chemicals Industry in China (PhosChemEE) Project
Countries China	Agency(ies) UNDP		
Other Executing Partner(s) ⓘ Ministry of Industry and Information Technology (MIIT)		Executing Partner Type Government	

3/1/2022 MY:

Yes, comments were addressed and the project document was revised.

Agency Response

Comment:

(i) M&E is budgeted separately in the budget table (\$200,000) but included under PMC in table B of the Portal entry (\$444,923) ? in this context, M&E is a separate component outside PMC, so the activities related to M&E are charged to the M&E column accordingly. Please amend it accordingly.

Response:

Per design, the cost for M&E activities of the project is part of the PMC budget. However, the M&E costs have been presented separately in the Total Budget and Work Plan (TBWP) of the project. In this regard, the sum of the M&E cost and the other project management expenses is the same as the approved PMC budget in the GEF-approved PIF.

Comment:

(ii) The activities related with Monitoring all risks, Monitoring of stakeholder engagement plan and Monitoring of gender action are wrongly charged to PMC ? these have to be charged to M&E.



Response:

Thanks for pointing this out. The other unnecessary texts in the description of the cost of the stated specific monitoring activities have been deleted. The explanations for the contractual services (individual) budgets have been re-stated as follows: USD 6,000/yr. *5 (Monitoring all risks USD 3,000/yr., Monitoring of stakeholder engagement plan USD 1,500/yr., and Monitoring of gender action plan USD 1,500/yr.

Comment:

(iii) International consultants are budgeted to get paid with \$35,000 but there is not any explanation about the tasks / deliverables for these consultants ? please clarify it.

Response:

The international consultants that will be engaged by the project will doing analyses and evaluation of the existing policies and institutional frameworks in other countries to define the pathway towards carbon neutral development in phosphate mining and refining. These experts are required to provide suggestions to support and promote the low-carbon development in phosphate mining and refining in China.

The cost of USD 35,000 is inclusive of professional fees, travel expenses and DSA) for 50 working days at USD 700 per working day.

Comment:

(iv) Local Consultants will be paid \$20,000 for activities related with Project Management, but they are charged to M&E ? they need to be charged to PMC. Also, the same budget line talks about \$50,000, but only \$10,000 are charged to the sources (in this case, M&E) ? please amend it.

Response:

Thanks for pointing this out. The other unnecessary texts in the description of the cost of the stated specific monitoring activities have been deleted. The explanations for the local consultant budgets have been re-stated as follows: USD 2,000/yr.*5= USD 10,000 (M&E) for Monitoring of social and environmental safeguard screening.

Comment:

(v) Local consultants will be paid \$200,000 but there is not any explanation about the tasks / deliverables for these consultants ? please clarify it.

Response:

The services of qualified local consultants will be engaged in the implementation and operation of the designed, engineered and planned demonstrations on the application of energy efficient technologies for mining activities of selected companies located in the provinces of Guizhou, Yunnan and Sichuan (Activity 1.2.2.1). Local consultants will also be hired in the implementation and operation of the designed, engineered and planned demonstrations on the application of green and low carbon technologies and renewable energy use for phosphate rock beneficiation activities of selected companies located in Sichuan Province (Activity 1.2.2.2).

The US\$ 200,000 budget for the local consultants is inclusive of professional fees, travel expenses and DSA) for 400 working days at USD 500 per working day. USD 100K is allocated for full time local consultants working on Activity 1.2.2.1, while USD 100K is also allotted for full time local consultants working on Activity 1.2.2.2.

Comment:

(vi) Local consultants for Monitoring and Evaluation / Terminal Evaluation are charged to PMC ? they must be charged to M&E ? please amend it.

Response:

Thanks for pointing this out. The other unnecessary texts in the description of the cost of the stated specific monitoring activities have been deleted. The explanations for the local consultant budgets have been re-stated as follows: USD 2,000/yr.*5= USD 10,000 (M&E) for Monitoring of social and environmental safeguard screening; USD 500/day * 40 = USD 20,000 for mid-term review (M&E); and USD 20,000 will be paid in Year 5 for Termination Evaluation. (M&E).

Comment:

2. Status of Utilization of Project Preparation Grant (PPG): in this section it is requested to provide detailed funding amount of the PPG activities financing status ? however, such details are not presented in the table (see screenshot below) ? please amend it.

Response:

The relevant annexed have been updated and revised accordingly. At present, the total PPG expenditure is US\$ 154,305 and US\$ 45,695 are committed funds.



Comment:

3. While the budget table shows that several components will be financially managed by the Ministry of Natural Resources, the Executing Partners in Project Information and section 6 (Institutional Arrangements and Coordination) only show the Ministry of Industry and Information Technology as the entity responsible for the project's execution ? please amend it in both sections (Project Information and Institutional Arrangements and Coordination).

Response:

Per the UNDP's Program Operations Policies and Procedures (POPP), UNDP selects one implementing partner for each project in consultation with the government coordinating agency. One implementing partner is selected for each project. This project is a joint undertaking of the Ministry of Industry & Information Technology (MIIT) and the Ministry of Natural Resources (MNR). Per discussions with the country's GEF OFP, MIIT and MNR, it was agreed that for this project the designated implementing partner (executing agency) is the MIIT. The MNR will be a responsible partner that will carry out specific components of the project on behalf of the MIIT. These are on the activities involving the phosphate mining and refining sub-sector (Components 1.1, 1.2 and 3.1). The MIIT will implement the activities involving the phosphate chemicals production sub-sector (Components 2.1, 2.2 and 3.2). As a responsible partner, it will assist the MIIT in ensuring close coordination between the relevant government agencies involved in the project at both national and local levels. MNR will coordinate with the MIIT the use of GEF funds allocated each year by the UNDP for Component 1 and part of Component 3 activities and carry out regular reporting of achievements through the MIIT in accordance with UNDP rules and procedures.

Project description summary

2. Is the project structure/design appropriate to achieve the expected outcomes and outputs as in Table B and described in the project document?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, the project structure/design remains almost the same as in the PIF and it is appropriate to achieve the expected outcomes and outputs.

Please consider raising the ratio of co-financing over the PMC so that it will match that of the GEF funding.

1/20/2022 MY:

Yes, comments were addressed.

8,898,45693,329,687

444,923 4,434,000

5.0% 4.8%

Agency Response

Response (to 12/15/2021 MY):

To make the ratio of the co-financing for PMC the same to that of the GEF funding for PMC, the amount of co-financing for PMC is increased to US\$ 4,655,414. The co-financing for Component 2.2 is reduced to US\$ 29,196,586 resulting in an increased co-financing sub-total. The new co-financing sub-total is US\$ 93,108,273.

3. If this is a non-grant instrument, has a reflow calendar been presented in Annex D?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

N/A

Agency Response

Co-financing

4. Are the confirmed expected amounts, sources and types of co-financing adequately documented, with supporting evidence and a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized, and a description of any major changes from PIF, consistent with the requirements of the Co-Financing Policy and Guidelines?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, the ratio of overall co-financing to GEF project funding is 10.46, and the ratio of overall investment-mobilized to GEF project funding is 9.2.

Agency Response

GEF Resource Availability

5. Is the financing presented in Table D adequate and does the project demonstrate a cost-effective approach to meet the project objectives?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes.

Agency Response

Project Preparation Grant

6. Is the status and utilization of the PPG reported in Annex C in the document?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is reported in Annex C.

Agency Response

Core indicators

7. Are there changes/adjustments made in the core indicator targets indicated in Table E? Do they remain realistic?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, regarding the indicator targets, there are few changes from the PIF to the CEO ER. They remain realistic.

Agency Response

Part II ? Project Justification

1. Is there a sufficient elaboration on how the global environmental/adaptation problems, including the root causes and barriers, are going to be addressed?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 21-24.

Agency Response

2. Is there an elaboration on how the baseline scenario or any associated baseline projects were derived?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 25-33.

Agency Response

3. Is the proposed alternative scenario as described in PIF/PFD sound and adequate? Is there sufficient clarity on the expected outcomes and components of the project and a description on the project is aiming to achieve them?

Secretariat Comment at PIF/Work Program Inclusion

12/15/2021 MY:

Yes, the alternative scenario and the theory of change (TOC) are presented on pages 33-42.

Agency Response

4. Is there further elaboration on how the project is aligned with focal area/impact program strategies?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 40.

Agency Response

5. Is the incremental reasoning, contribution from the baseline, and co-financing clearly elaborated?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 40-41.

Agency Response

6. Is there further and better elaboration on the project's expected contribution to global environmental benefits or adaptation benefits?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 41-42 and Annex 10 is presented in an attached document which is uploaded onto the document folder of the GEF Portal.

Agency Response

7. Is there further and better elaboration to show that the project is innovative and sustainable including the potential for scaling up?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 42-43.

Agency Response

Project Map and Coordinates

Is there an accurate and confirmed geo-referenced information where the project intervention will take place?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Not completed yet.

A map is presented on page 52. Under the map, please (1) indicate the exact places of the GEF project demonstrations; (2) please elaborate if the project demonstration will take

place at the boarder of Yunnan province where there might be any conflict of interest in international borders between China and its neighboring countries.

1/20/2022 MY:

Yes, comments were addressed.

Agency Response

Response (to 12/15/2021 MY):

Annex 2 of the ProDoc already provides the geographical coordinates of the project's demo sites.

The planned demo sites in the province of Yunnan are far from the geographical border with China's neighboring countries, and that there are no known territorial disputes with the neighboring countries that border this province.

(ProDoc: Annex 2, CERDoc: Annex D)

Child Project

If this is a child project, is there an adequate reflection of how it contributes to the overall program impact?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

N/A

Agency Response

Stakeholders

Does the project include detailed report on stakeholders engaged during the design phase? Is there an adequate stakeholder engagement plan or equivalent documentation for the implementation phase, with information on Stakeholders who will be engaged, the means of engagement, and dissemination of information?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 53-59 of the CEO RE document and in Annex 7 of the attached document that was uploaded to the GEF Portal.

Agency Response

Gender Equality and Women's Empowerment

Has the gender analysis been completed? Did the gender analysis identify any gender differences, gaps or opportunities linked to project/program objectives and activities? If so, does the project/program include gender-responsive activities, gender-sensitive indicators and expected results?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on 59-69 of the CEO ER document and in Annex 8 of an attached document that was separately uploaded to the GEF Portal.

Agency Response

Private Sector Engagement

If there is a private sector engagement, is there an elaboration of its role as a financier and/or as a stakeholder?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 70.

Agency Response

Risks to Achieving Project Objectives

Has the project elaborated on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved? Were there proposed measures that address these risks at the time of project implementation?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Not completed at this time.

In Section 5. Risks to Achieving Project Objectives on page 70 of the CEO ER document, please elaborate on risks, including climate change, potential social and environmental

risks that might prevent the project objectives from being achieved. The agency may copy relevant information from the ProDoc while addressing the issue.

While addressing or screening climate risks, the Agency is encouraged to use STAP's methodology.

While addressing the risks of COVID-19 and taking into account any opportunities of COVID-19, please consider the following elements.

1.1 General: Describe briefly how the pandemic overall is addressed in the project, including associated impacts, risks and opportunities. Projects are required to identify and establish likely impacts and risks from COVID-19, and how they will be dealt with in the context of delivering global environment benefits and climate adaptation and resilience benefits;

1.2 Risk analysis: Please consider any risks and measures to deal with the risks that are caused by COVID-19 and post-COVID-19. These risks include (1) availability of Technical Expertise and Capacity and Changes in Timelines in the selected provinces; and (2) any expected financing from the government and co-financing from all stakeholders. Please describe further how risks from COVID-19 have been analyzed and mitigation strategies incorporated into the design of this project. The CEO ER package is expected to include consideration to the risks that COVID-19 poses for all aspects of project implementation.

1.3 Opportunity analysis: Describe further how the project has identified potential opportunities to mitigate impacts (if any) caused by COVID-19 to deliver GEBs and/or climate adaptation and resilience benefits, and contribute toward green recovery and building back better.

1/20/2022 MY:

Yes, comments were addressed and the project document was revised.

Agency Response

Response (to 12/15/2021 MY):

Comment:

In Section 5. Risks to Achieving Project Objectives on page 70 of the CEO ER document, please elaborate on risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved. The agency may copy relevant information from the ProDoc while addressing the issue. While addressing or screening climate risks, the Agency is encouraged to use STAP's methodology.

Response:

Page 70 of the CEO ER document (CERDoc) is Annex K: Changes from the PIF. Annex L of the CERDoc is a detailed description of the strategies and actions to be taken in

addressing potential Covid-19 issues during the implementation of the project to ensure that such issues will not significantly impact the project implementation. Annex M of the CERDoc is a detailed description of the climate risk assessment in the partner provinces. The assessments that were made are based on the results of the analyses that were carried out during the preparation of China's 3rd National Communications to the UNFCCC (including the biennial update reports). The climate risk assessments will be updated during the course of project implementation using the results of climate observations and vulnerability and adaptation analyses that will be carried out during the preparation of China's 4th National Communications to the UNFCCC. The STAP's methodology for screening climate risks will be considered in updating the climate risk assessments.

(CERDoc: Annex L, CERDoc: Annex M)

Furthermore, the ProDoc includes Annex 5: UNDP Risk Register, which summarizes the identified project risks (operational, social, political, financial and environmental). For each risk, the ratings are provided to the potential impact and likelihood/probability, the relevant mitigation measures, the project entity/entities that is/are responsible to monitor it, and the current status trend during the PPG stage. These risks will be monitored, and the status updated regularly during the project implementation. Among the identified risks are: (a) COVID-19 will negatively impact the social-economic development of the project areas; and (b) Extreme climate events in the project areas will delay and negatively affect the installation, operation and monitoring of the demonstration activities. Addressing the former is presented in Annex L, while the tackling of the latter is presented in Annex M.

(ProDoc: Annex 5)

Comment:

While addressing the risks of COVID-19 and taking into account any opportunities of COVID-19, please consider the following elements.

1.1 General: Describe briefly how the pandemic overall is addressed in the project, including associated impacts, risks and opportunities. Projects are required to identify and establish likely impacts and risks from COVID-19, and how they will be dealt with in the context of delivering global environment benefits and climate adaptation and resilience benefits.

Response:

Annex L (in CERDoc) provides the description of how the pandemic is addressed in project inclusive of associated impacts, risks and opportunities. In summary, the approach includes strict enforcements of public health measures such as mandating the reduced number of people in face-to-face gatherings and wearing masks in crowded areas and enclosed places. These may increase the cost of the government's epidemic prevention and control, corporate business economics (e.g., PCI companies) will be affected negatively to a certain extent during the epidemic period, and some people in the PCI may be infected by the COVID-19 virus. However, with the enforcement of the epidemic prevention and control measures, there are also potential opportunities for people and companies in the PCI to adopt widely new automated technologies in virtual communications and in production operations and processes. This opens opportunities for PCI companies to consider enhanced process controls which can improve the efficiency of production

operations, reduce losses/wastages, reduce energy consumption, and bring about reduced GHG emissions

(CERDoc: Annex L; Item a)

Comment:

1.2 Risk analysis: Please consider any risks and measures to deal with the risks that are caused by COVID-19 and post-COVID-19. These risks include (1) availability of Technical Expertise and Capacity and Changes in Timelines in the selected provinces; and (2) any expected financing from the government and co-financing from all stakeholders. Please describe further how risks from COVID-19 have been analyzed and mitigation strategies incorporated into the design of this project. The CEO ER package is expected to include consideration to the risks that COVID-19 poses for all aspects of project implementation.

Response:

Annex L (in CERDoc) also describes how risks from COVID-19 have been analyzed and mitigation strategies incorporated into the design of this project. In summary, the risks were analyzed using the experiences and lessons learned on how the Chinese government, the public and private sectors, and other sectors of the national economy reacted and addressed this public health issue, as well as actions and measures taken by the national and local governments that were effective and those with less success. Using these knowledge about the nature and extent of the pandemic the risks of potential worsening public health situations are analyzed in a much better way thereby understanding the extent of the potential risks, and in so doing able to come up with more appropriate and cost-effective mitigation measures. Other industry experts and where necessary, local public health officials in the project areas were also consulted to get a wide perspective view of the risk issues and come up with the appropriate preventive and alleviative mitigation measures.

(CERDoc: Annex L; Item b)

Comment:

1.3 Opportunity analysis: Describe further how the project has identified potential opportunities to mitigate impacts (if any) caused by COVID-19 to deliver GEBs and/or climate adaptation and resilience benefits and contribute toward green recovery and building back better.

Response:

Annex L (in CERDoc) also describes how the project has identified opportunities to mitigate the impacts of the pandemic in delivering GEBs, resilience benefits, contribute towards green recovery and building back better. In summary, the most notable opportunity was the wide use of internet-based communications, which also presented opportunities for both public and private sector entities, as well as the academe, research community, NGOs/CSOs to enhancing the application of such technologies in their day-to-day business activities. The lessons learned and experience of these entities during the Covid-19 pandemic also presented opportunities for mitigating the impacts of Covid-19, such as showing to the PCI the importance of preventing infectious diseases from polluted bodies of water in the surrounding areas of PCI companies. This presents an opportunity for the local government and the PCI companies to work together to reduce the pollution brought

about by effluents from these companies. Another opportunity is for the project proponents and their partners to formulate effective mitigating actions to prevent and/or remedy any negative impacts of the pandemic (assuming it persists for a long time) on the project interventions that are intended directly to bring about GHG emissions, as well as actions that will sustain/maintain the achievements that would be realized.

(CERDoc: Annex L; Item c)

Coordination

Is the institutional arrangement for project implementation fully described? Is there an elaboration on possible coordination with relevant GEF-financed projects and other bilateral/multilateral initiatives in the project area?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 71-72.

Agency Response

Consistency with National Priorities

Has the project described the alignment of the project with identified national strategies and plans or reports and assessments under the relevant conventions?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 72-73.

Agency Response

Knowledge Management

Is the proposed ?Knowledge Management Approach? for the project adequately elaborated with a timeline and a set of deliverables?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 74-75.

Agency Response

Environmental and Social Safeguard (ESS)

Are environmental and social risks, impacts and management measures adequately documented at this stage and consistent with requirements set out in SD/PL/03?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Not completed at this time.

In Section 11. Environmental and Social Safeguard (ESS) on page 76 of the CEO ER document, please elaborate on Environmental and Social Safeguard that should cover social risks, impacts and management measures. The agency may copy relevant information from the ProDoc and/or from the attached document entitled "UNDP Social and Environmental Screening Procedure".

1/20/2022 MY:

Yes, comments were addressed.

Agency Response

Response (to 12/15/2021 MY):

During the project design stage, as per UNDP requirement, a Social and Environmental Screening (SES) of the proposed project has been done. The evaluation includes an assessment of the project design as to how it contributes to a strengthened social and environmental sustainability, covering the following: (a) mainstreaming of the human rights-based approach; (b) improving gender equality and women's empowerment; (c) mainstreaming sustainability and resilience; and (d) strengthening accountability to stakeholders. Bulk of the screening process is on the identification and management of Social and Environmental Risks. Under this part of the screening process is the identification of the potential Social and Environmental Risks. The SES process includes a checklist for (1) identifying potential risks; (2) determining the overall risk categorization of the project; and (3) determining the required level of assessment and management measures. Each identified risk is evaluated to determine the level of significance (impact and likelihood/probability). With a clear understanding of the nature, extent and significance of the risk, appropriate mitigation measures are identified.

The summary of the SES is in Annex 4 of the PhosChemEE ProDoc. There were 7 risks identified and evaluated. The risks include: (1) potential adverse impacts on enjoyment of the human rights of the affected population, potentially including ethnic minorities and/or vulnerable/disadvantaged groups, in the rural areas where the on-the-ground project activities will be carried out; (2) Potential adverse impacts to habitats and/or ecosystems.

ecosystem services or possible changes to the use of lands and resources (e.g. phosphogypsum processing and use); (3) potential health and safety risks to local communities and workers due to the transport, storage, and use and/or disposal of any hazardous or dangerous materials during demo installations; (4) potential impacts of climate change, particularly in the identified project sites in the partner provinces where there are risks of extreme weather that can be exacerbated by climate change; (5) The new installed energy efficient systems in the demos may not be operated and maintained properly and safely by the existing and newly hired operators; (6) potential adverse impacts due to the significant extraction, diversion or containment of surface and/or ground water; and (7) potential generation of GHG emissions if the implemented actions are not properly carried out as per design. The overall risk rating is High, and in this regard, an Environmental & Social Management Framework (ESMF) has been prepared during the PPG stage to ensure that the necessary steps are taken to manage the site-specific risks during implementation (during which site-specific assessments and management plans will be required).
(ProDoc: Annex 4)

Monitoring and Evaluation

Does the project include a budgeted M&E Plan that monitors and measures results with indicators and targets?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented on pages 75-76.

Agency Response

Benefits

Are the socioeconomic benefits at the national and local levels sufficiently described resulting from the project? Is there an elaboration on how these benefits translate in supporting the achievement of GEBs or adaptation benefits?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Not yet.

In Section 10. Benefits on page 76 of the CEO ER document, please briefly list the socioeconomic benefits due to the GEF project at the national and local levels. Please

elaborate how these local benefits translate in supporting the achievement of global environment benefits (CO2 emission reduction) or climate change adaptation benefits.

1/20/2022 MY:

Yes, comments were addressed and the project document was revised.

Agency Response

Response (to 12/15/2021 MY):

Bulk of the demonstrations that will be carried out under the project are on the application of energy efficient process technologies and technologies for cleaner production in the Phosphate Chemical Industry (PCI) in China. The application of these EE and cleaner production technologies will bring about energy savings, increased productivity, reduced material and energy losses, improved safety, etc., all of which will collectively bring about improved economic benefits to the PCI. The direct emission reductions will come from improvements facilitated by the proposed project in phosphate rock mining is expected to reduce the current specific energy consumption in phosphate ore mining and beneficiation/refining. The improvement of the mining efficiency (including improving mine recovery rate, mining dilution rate, and beneficiation recovery rate) is also expected to achieve an energy consumption reduction per ton of refined phosrock. In phosphate chemicals production, the EE and cleaner production technologies and techniques applications that the project will facilitate will bring about a reduction in the production process energy consumption. The direct energy savings that will be derived from these process and operational improvements will bring about direct GHG emission reductions. The project activities on low-carbon waste management systems will be carried out in: (1) phosphate chemicals production; (2) phosrock mining and refining. The first one is on the utilization of the by-product phosphogypsum as building material (specifically as filler in polymer composite plastic products. The second one is on the enhanced utilization of phosrock mine tailings as backfill in phosphate ore underground mining, and for the production of natural/biological phosphate fertilizer as replacement for the use of phosphate fertilizer. The resulting indirect energy savings will be from the reduced production of chemical phosphate fertilizers. Both of these indirect energy savings will have corresponding consequential GHG emission reduction.

In addition, there are other national benefits in terms of the reduced pollution of the water bodies that are near the PCI enterprises, reduction of the regional pollutant concentration in rural areas of Yunnan, Guizhou, Sichuan, and Hubei, promote the sustainable improvement of ecological environment in rural areas, and protect the livelihood of rural areas in these provinces.

(ProDoc: Part II; Sec. 10)

Annexes

Are all the required annexes attached and adequately responded to?

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, they are all presented.

Agency Response

Project Results Framework

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented in Annex A.

Agency Response

GEF Secretariat comments

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Not completed yet.

Please address the following comments of the GEF SEC indicated at the PIF stage:

10/29/2020 MY:

1. Please show meeting minutes with key stakeholders including the MIIT and MNR, provincial governments and private companies, and materialize co-financing from the MIIT and MNR and provincial governments.

2. 2. Please materialize co-financing from the private sector, including Yunnan Haoming Fine Phosphorus Chemical Co., Ltd., Yunnan Haokun Phosphorus Chemical Co., Ltd., and Yunnan Xuanwei Phosphorus Power Co., Ltd. In Yunnan province; Weng'an Xingnong Phosphorus Chemical Co. Ltd., Guizhou Yuedu Chemical Co., Ltd. and Guizhou Batian Ecological Engineering Co., Ltd. in Guizhou province; Hubei Xiangyun (Group) Chemical Co., Ltd., Hubei Huangmailing Phosphorus Chemical Co., Ltd., Xiangyang Zedong Chemical Group Co., Ltd. in Hubei province; Sichuan Hongda (Group) Co., Ltd., Sichuan Blue Ocean Chemical (Group) Co., Ltd., and Sichuan Hanyuan Chemical General Factory in Sichuan province.

1/20/2022 MY:

Yes, comments were addressed.

Agency Response

Response (to 12/15/2021 MY):

Comment:

1. Please show meeting minutes with key stakeholders including the MIIT and MNR, provincial governments and private companies, and materialize co-financing from the MIIT and MNR and provincial governments.

Response:

The discussions among the project proponents (MIIT & MNR) with the other project partners such as the PCI companies leading to the conceptualization of the project were mainly through informal meetings. A logical framework analysis (LFA) workshop was conducted to develop and agree on the project framework (log frame). This was attended by the project proponents, partners (including UNDP) and stakeholders and a LFA Workshop Meeting Report was produced. Together with the designated project development team (PDT), the project partners (e.g., provincial DIITs and DNRs, and the demo companies) held meetings to discuss and define the project activities and project demonstrations. In these meetings, each partner have indicated their ongoing activities/programs concerning the PCI, as well as their expressed vision for the industry. Collectively, these form the main basis of the estimated financing that each party intends to contribute to the project. However, these informal meetings did not have the benefit of designated rapporteurs documenting the meeting minutes. Nonetheless, it is the common understanding of the project proponents, partners and stakeholders that the discussion results of each meeting are directly reflected in the PhosChemEE ProDoc and CERDoc. Furthermore, the co-financing commitment letters that were issued by the project partners are clear manifestation of their agreement to collaborate, support and ensure the successful implementation of the proposed project.

Comment:

2. Please materialize co-financing from the private sector, including Yunnan Haoming Fine Phosphorus Chemical Co., Ltd., Yunnan Haokun Phosphorus Chemical Co., Ltd., and Yunnan Xuanwei Phosphorus Power Co., Ltd. in Yunnan province; Weng'an Xingnong Phosphorus Chemical Co. Ltd., Guizhou Yuedu Chemical Co., Ltd., and Guizhou Batian Ecological Engineering Co., Ltd. in Guizhou province; Hubei Xiangyun (Group) Chemical Co., Ltd., Hubei Huangmailing Phosphorus Chemical Co., Ltd., Xiangyang Zedong Chemical Group Co., Ltd. in Hubei province; Sichuan Hongda (Group) Co., Ltd., Sichuan Blue Ocean Chemical (Group) Co., Ltd., and Sichuan Hanyuan Chemical General Factory in Sichuan province.

Response:

During the project design stage, the list of the demonstration hosts was finalized. Most of the initially identified PCI companies have been changed. The final list of host demonstration companies include the following: Guizhou Wengfu Group; Leibo County Huarui Mining Company; Mabian Fuma Phosphate Company; Sichuan Mabian Tianrui Mining Company; Guizhou Kailin Mining and Fertilizer Co., Ltd.; Sichuan Lomom Phosphorus Chemical Co., Ltd.; Hubei Xiangyun (Group) Chemical Co., Ltd.; Yunnan Phosphate Group; Yunnan Xiangfeng Industrial Group Co., Ltd.; and Zhonglicheng Industry Co., Ltd. These participating PCI companies have each issued co-financing commitment letter to the PhosChemEE Project, particularly to the demo activities that each of them are hosting. The total private sector co-financing accounts for 79.5% of the total co-financing of the project.

(CERDoc: Part I; Sec. C, ProDoc: Annex 11)

Council comments

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented in Annex B.

Agency Response

STAP comments

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented in Annex B on pages 87-94.

Agency Response

Convention Secretariat comments

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

N/A

Agency Response

Other Agencies comments

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

N/A

Agency Response

CSOs comments

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

N/A

Agency Response

Status of PPG utilization

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented in Annex C on page 117.

Agency Response

Project maps and coordinates

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Yes, it is presented in Annex D on page 118.

Agency Response

Does the termsheet in Annex F provide finalized financial terms and conditions? Does the termsheet and financial structure address concerns raised at PIF stage and that were pending to be resolved ahead of CEO endorsement? (For NGI Only)

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

N/A

Agency Response

Do the Reflow Table Annex G and the Trustee Excel Sheet for reflows provide accurate reflow expectations of the project submitted? Assumptions for Reflows can be submitted to explain expected reflows. (For NGI Only)

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

N/A

Agency Response

Did the agency Annex H provided with information to assess the Agency Capacity to generate and manage reflows? (For NGI Only)

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

N/A

Agency Response

GEFSEC DECISION

RECOMMENDATION

Is CEO endorsement recommended? (applies only to projects and child projects)

Secretariat Comment at CEO Endorsement Request

12/15/2021 MY:

Not at this time.

Please address the comments above.

1/26/2022 MY:

Please address the comments of the GEF PPO that are shown in Box 1 of this review sheet.

3/1/2022 MY:

Yes, comments were addressed and the project document was revised.

The PM recommends CEO endorsement.

Review Dates

	Secretariat Comment at CEO Endorsement	Response to Secretariat comments
First Review	12/15/2021	
Additional Review (as necessary)	1/20/2022	
Additional Review (as necessary)	3/1/2022	
Additional Review (as necessary)		

**Additional Review
(as necessary)**

CEO Recommendation

Brief reasoning for CEO Recommendations

The objective of the project is to enable the extensive application of low carbon and energy efficient technologies in the phosphate chemicals industry in China. The objective will be achieved by delivering many outputs within three components: (1) Green and Low Carbon Development and Operation of Phosphate Mines; (2) Green and Low-Carbon Design and Operation of Phosphate Chemicals Production Facilities; and (3) Green and Low Carbon Design and Operation of Waste Management Systems in the Phosphate Chemicals Industry. The outputs of the project include but not limited to: (1) Improved design for the mining and refining operations in the demo phosrock mines in Weng'an county in Guizhou province, and Mabian county in Sichuan province; (2) Feasibility analyses of the application and operation of green, energy efficient and low carbon phosrock mining and refining systems; (3) Implementation plans (including financing arrangements) for each green, energy efficient and low carbon technology application in the demo phosrock mines; (4) Improved design for cleaner production demos of phosphate; (5) Feasibility studies of the application and operation of green, energy efficient and low carbon phosphate chemical production systems; and, (6) Implementation plans (including financing arrangements) for each green, energy efficient and low carbon technology application in the demo phosphate chemical companies. The GEF will provide \$6.73 million or 76% of its total budget for three tangible investments to display energy efficient technologies and low carbon production processes in phosphate mining and phosphate chemicals industry. This project demonstrates innovation, sustainability and scaling-up in many ways including (1) mainstreaming low/zero carbon production policy in phosphate mining and production industry in line with China's 2060 zero-carbon economy goal; (2) integrating two Chinese ministries (the Ministry of Natural Resources and the Ministry of Industry and Information Technology) to work together to deal with challenges while transforming China's phosphate mining and phosphate production from a high carbon system to a low or zero carbon system; and (3) mobilizing co-financing from private companies, and the national and provincial governments. Budgeted with a total of GEF \$9,343,379 and co-financing \$97,763,687, this project aims at mitigating 36 million tonnes of CO₂ in its lifetime of operation.

Impact of COVID -19

Due to strict enforcements of government public health measures such as mandating the reduced number of people in face-to-face gatherings and wearing masks in crowded areas and enclosed places, China, as of January 2022, has not got a few cases and deaths caused

by COVID-19. These measures may have increased the cost of the government's epidemic prevention and control, but they have effectively and considerably reduced the negative impact of COVID-19 on the Chinese economy and Chinese people. Looking ahead, we cannot see a high possibility that COVID-19 will cause great negative impact on the implementation of the GEF project.

Opportunities of COVID-19:

With the enforcement of the Chinese epidemic prevention and control measures, there are also potential opportunities for people and companies in the Phosphate Chemicals Industry (PCI) to adopt widely new automated technologies in virtual communications and in production operations and processes. This opens opportunities for PCI companies to consider enhanced process controls which can improve the efficiency of production operations, reduce losses/wastes, and cut energy consumption, which will bring about GHG emission reductions.