



Project Implementation Report

(1 July 2021 – 30 June 2022)

Project Title:	<i>Sustainable Industrial Zone Development in Peru</i>
GEF ID:	<i>9206</i>
UNIDO ID:	<i>150061</i>
GEF Replenishment Cycle:	<i>GEF-6</i>
Country(ies):	<i>Peru</i>
Region:	<i>LAC - Latin America and Caribbean</i>
GEF Focal Area:	<i>Chemicals and Waste (CW)</i>
	<i>Climate Change Mitigation (CCM)</i>
Integrated Approach Pilot (IAP) Programs¹:	<i>N/A</i>
Stand-alone / Child Project:	<i>Stand-alone</i>
Implementing Department/Division:	<i>ENV / IRE</i>
Co-Implementing Agency:	<i>N/A</i>
Executing Agency(ies):	<i>Ministry of Production, Peru</i>
Project Type:	<i>Full-Sized Project (FSP)</i>
Project Duration:	<i>48 months</i>
Extension(s):	<i>1</i>
GEF Project Financing:	<i>4,114,400</i>
Agency Fee:	<i>462,080</i>
Co-financing Amount:	<i>44,457,804</i>
Date of CEO Endorsement/Approval:	<i>3/9/2018</i>
UNIDO Approval Date:	<i>3/22/2018</i>
Actual Implementation Start:	<i>5/30/2018</i>
Cumulative disbursement as of 30 June 2022:	<i>1,196,244</i>
Mid-term Review (MTR) Date:	<i>7/30/2021</i>
Original Project Completion Date:	<i>5/30/2022</i>
Project Completion Date as reported in FY21:	<i>5/30/2022</i>
Current SAP Completion Date:	<i>5/31/2023</i>
Expected Project Completion Date:	<i>5/31/2023</i>

¹ Only for GEF-6 projects, if applicable

Expected Terminal Evaluation (TE) Date:	4/18/2023
Expected Financial Closure Date:	12/31/2023
UNIDO Project Manager ² :	Christian Susan

I. Brief description of project and status overview

Project Objective		
<p><i>The Project will focus on enhancing regulatory mechanisms for sustainable industrial zone (SIZ) development and increased adoption and diffusion of low-carbon and clean technologies and practices, to reduce unintentional POPs (uPOPs), greenhouse gases (GHG), air pollutants and improve sound chemicals management in one Peruvian industrial zone.</i></p>		
<i>Project Core Indicators</i>	<i>Expected at Endorsement/Approval stage</i>	
<i>Support to transformational shifts towards a low-emission and resilient development path.</i>	<i>Total emissions: 1,352,719 tCO₂ eq. result from bottom-up approach.</i>	
<i>Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern</i>	<i>Total emission reduction: 8.92 u-POPs (g TEQ/a)</i>	
<i>Number of companies adopting best practices</i>	<i>35 companies adopt clean and low carbon practices</i>	
<i>Number of policies focusing on low carbon and clean technologies developed</i>	<i>At least 3 policies drafted and submitted to the national Government (3)</i>	
<i>Number of measures proposed and adopted to enhance institutional and regulatory framework for sustainable industrial zone development</i>	<i>At least 3 institutional or regulatory enhancement instruments proposed and adopted</i>	
<i>Number of feasibility studies conducted</i>	<i>35 feasibility studies completed and submitted to companies (3)</i>	
<i>Number of representatives from governmental institutions, private sector and consultants trained in SIZ development (male/female ratio)</i>	<i>At least 30 people trained in capacity building seminars on SIZ, 30% women and 70% men. (30)</i>	
<i>Number of independent evaluations carried out</i>	<i>One mid-term evaluation and one terminal evaluation carried out</i>	

Baseline

² Person responsible for report content

Despite efforts to promote environmental management systems and regulations in recent years, Peru faces a number of environmental challenges, most of them concentrated in regions of high industrial activity, such as Callao and Lima. Additionally, there are barriers to addressing these challenges, which include: policy and institutional framework, technology, information, delivery skills, and financing.

The industrial activities in Lima and Callao generate a wide range of pollutants. Significant GHG emissions of industrial activities are mainly caused by agri-food, and fish processing. Chemical and uPOPs emissions are mainly produced by chemical, metal/foundries, plastic, and textile industries all emissions due to industrial operations with high heat requirements, inefficient technology (low-tech and old technology), losses due to bad insulation, and inadequate operation and maintenance. Further inadequate operation of cooling systems leads to the liberation of refrigerants agents with very high GWP (global warming potential). Substantial other air pollutants acting as precursors for GHG like NMVOC, SO₂, NO_x, and CO were reported. (e.g., by the Regional Health Department of Callao (DIRESA-Callao).

Overall Ratings ³	FY22	FY21
Global Environmental Objectives (GEOs) / Development Objectives (DOs) Rating	Moderately Satisfactory (MS)	Moderately Satisfactory (MS)
<p>Despite the late start of the project, it is expected to partially achieve the project global environmental goals, and global environmental benefits, with only minor shortcomings. However due to the COVID pandemic the implementation of uPOPs and CO₂ mitigation measures are delayed. The feasibility studies and financing scheme started to speed up at the beginning of 2022.</p>		
Implementation Progress (IP) Rating	Moderately Satisfactory (MS)	Moderately Satisfactory (MS)
<p>The project is expected to <u>achieve most</u> of its major <u>relevant</u> objectives but measures to speed up implementation have to be taken.</p>		
Overall Risk Rating	Moderate Risk (M)	Moderate Risk (M)
<p>The implementation of the projects moves an adequate speed. No major changes from year 2021 to year 2022 have been identified. Rating remains the same in both years. However, the implementation of the co-financing mechanism should be speed up to ensure the uPOPs and CO₂ emission technology is installed in companies in the Callao Industrial Zone.</p>		

II. Targeted results and progress to-date

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

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress in FY22
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³ Please refer to the explanatory note at the end of the document and assure that the indicated ratings correspond to the narrative of the report

Component 1 – Policy framework for sustainable industrial zone development				
Outcome 1.1: Regulations for the planning and management of sustainable industrial zones including policies on industrial pollution management and responsibilities in industrial zones developed and proposed to the government for approval.				
Output 1.1.1: Regulation, planning aids, and policies for sustainable industrial zone master planning developed and submitted to the government for approval.	Number of policy instruments for SIZs developed.	Current policy instruments, such as the Law on PITES, neglect to consider sustainability (such as gender and socio-environmental aspects) for industrial zones.	At least 3 policy instruments developed (3)	After the policy gap analysis was finalized, a national consultant is preparing the work plan to implement the recommendations for improving the regulatory framework for ZIS. Projection: Q2 2022
	Number of documents outlining a roadmap for SIZ development in Peru (taking into account environment, social and gender dimensions) developed	Current guidelines for eco-industrial parks (EIP), and Sustainable Industrial Areas (SIA), for instance, are primarily conceptual in nature. There are currently no strategic guidelines/roadmaps for SIZ development in Peru.	Road map for Callao and Peru (including gender and environmental measures) developed and lessons learned documented (1)	A company to implement the SIZ road map will be hired in Q4 2022. The road map will develop in Q2 2022 describing the more suitable SIZ management model, RECP technical assistance procedure, and the IZ management unit office.
	Number of databases with information on industrial zones in Peru and associated environmental pollutants	Current databases lack substantial information on environmental pollutants. In Peru there are currently no databases that track volume and type of material streams, industrial output or residual flows.	At least one database on environmental pollutants caused by industry developed (1)	The process of strengthening the environmental information system was completed and delivered to PRODUCE in Q1, 2022.
Outcome 1.2 Policies on financial and non-financial incentives for promoting low-carbon, clean technologies and environmentally-friendly practices developed and submitted to the government for approval				
Output 1.2.1: Proposal for financial and non-financial mechanisms and incentives drafted and submitted.	Number of financial mechanisms developed for companies in the industrial area	Currently there are no policies on fiscal and tax incentives specifically for companies located in the Callao industrial zone	At least two proposals for financial and non-financial mechanisms drafted (2)	- Background: financial and non-financial mechanisms assessment for SIZ in Peru was finalized in Q2, 2022. - In June 2022, a service provider for developing a proposal of 3 non-financial mechanisms for SIZ was concluded.
Component 2 – Capacity building on sustainable industrial zone planning				
Outcome 2.1: Improved level of expertise in sustainable industrial zone themes amongst representatives of private and public sectors				
Output 2.1.1: Training modules delivered for master planning of sustainable industrial zones.	Number of training modules	Current training modules do not encompass the 6 key components of SIZ	At least 5 training modules developed and delivered	- 1 high-level seminar on international best practices in ISZ planning was carried out in June 2021. - 4 workshops on ZIS planning and management was completed by June 2021
	Number of people trained (male/female ratio)	Representatives from the public and private sectors have received no specific training in the 6 key components	30 people trained, 30% women and 70% men (30)	Total: 66 people trained. >40% women
Output 2.1.2: Training modules delivered for resource efficient and cleaner production, clean and low-carbon technologies.	Number of training modules	Current training modules do not apply the concepts of RECP to SIZ	At least 10 training modules developed and delivered (10)	-10 modules developed for RECP training completed. - 9 modules developed for Cleaner Production Voluntary Agreements completed

	Number of people trained (male/female ratio)	Currently there are 447 consultants (out of 733) in PRODUCE's database with environmental advisory expertise; the majority of which are from the private sector	30 people trained, 30% women and 70% men (30)	Total: 39 people trained > 30% women
Output 2.1.3: Training modules delivered for sound chemicals management.	Number of training modules Number of people trained (male/female ratio)	Current training modules do not apply the concepts of sound chemicals management to SIZ Currently there are 447 consultants (out of 733) in PRODUCE's database with environmental advisory expertise; of these there is no record of how many have been trained on sound chemical management	At least 7 training modules developed and delivered (10) 20 people trained, 30% women and 70% men (30)	- 7 modules of rational management of chemical completed Total: 32 participants > 30% women
Output 2.1.4: Upgrade of the existing national database for qualified consultants in the field of low carbon and cleaner production (RECP) and sound chemicals management	Number of databases on qualified consultants in the field of low carbon and cleaner production (RECP) and sound chemicals management	Current databases do not specify on expertise in RECP or sound chemicals management	One national registry with at least 100 qualified consultants (100)	Progress at 50%. Due to restrictions in the consultants certification the database will be systematized in the project web page. It will be complemented with specific training sessions.
Outcome 2.2: Improve and disseminated collaboration between companies, government and financial institutions in environmental management and concluded investments				
Output 2.2.1. Technical Unit for sustainable industrial zone development established	Technical unit specific to the needs of the industrial zone developed	Currently there is no unit in Callao for environmental advisory and technical services	One proposal for a technical unit for industrial zones submitted (1)	To be initiated: UTG proposal. Consultant selected to prepare proposal
Component 3 – Pilot demonstration of clean and low-carbon technologies				
Outcome 3.1: Potential companies and services determined in industrial zone Callao, strategy on clean and low-carbon technology developed				
Output 3.1.1: Detailed feasibility studies for technology application and transfer and cleaner production assessments carried out.	Number of feasibility studies conducted	There are have been no feasibility studies for low carbon / Clean technology carried out in the project target area	35 feasibility studies completed and submitted to companies	- Background: More than 200 companies identified - 55 letters of interest signed - 20 RECP technical assistance - 8 companies developing feasibility studies"
Outcome 3.2: Inclusive socio-economic projects assessed and initiated.				
Output 3.2.1. Set of inclusive socio-economic projects identified	Number of people benefiting from community projects (male/female) Amount of investments in socio-	There is currently no data on the number of people benefiting from community projects. Current and planned investments in road	1,000 male; 1,000 female.	- As a result of the Mapping of projects exercise, Seven inclusive socio-economic projects identified in Callao - Out of the seven identified projects in Callao, five projects prioritized to be supported by the project. - In Q4 2022 feasibility studies/profiles of the prioritized socio-economic projects will be developed in close coordination between PRODUCE and the local Government. Investments will be identified based on the projects chosen. Documents from the involved

	economic projects (USD millions)	systems and connectivity for Callao amount to USD 900 million, but it is unclear whether they incorporate socio-economic and environmental aspects	Investment of USD 35 million in socio-economic projects	institutions confirming the investment plan will be required Scheduled for Q1 2023
Outcome 3.3: Increased public awareness on sustainable industrial zones				
Output 3.3.1. Public awareness and communication events held and project results disseminated.	Number of public awareness raising events	Currently there are no recorded awareness raising events on SIZ	At least 10 public events for awareness raising carried out (10)	More than 10 awareness-raising events held.
	Number of people reached (male/female)	There is no record of community members attending awareness raising events on SIZ	At least 1000 people participate in awareness raising events (1000), 30% women and 70% men	500 participants. Projection Q4 2022
	Number of gender-specific training	There is no record of community members attending gender specific trainings in the project target area	At least two gender specific training (2)	First training planned for August 25, 2022 Scheduled for Q4 2021
Outcome 3.4: New installations of clean technologies and practices in selected companies implemented and financed.				
Output 3.4.1 Access to alternative finance established; clean technology investment projects selected.	Number of financial mechanisms available to companies for clean and low carbon investments	The selection criteria of current financial mechanisms often limits the participation of companies from a given sector and do not target SIZ	At least 3 financial mechanisms for clean and low carbon investments	A mechanism was developed to co-finance companies investments of the eligible projects Manuals containing procedures and regulations were finalized in Q2, 2022. The co-financing mechanism has to be approved by the Ministry of Production scheduled for Q4 2022
Component 4 - Monitoring and Evaluation				
Outcome 4.1: Monitoring and evaluation procedures				
Output 4.1.1 Monitoring and Evaluation mechanism implemented	Number of independent evaluations carried out	No independent assessments have been carried out	One mid-term evaluation and one terminal evaluation carried out	-Weekly progress report meetings (Minutes). - 3 Steering Committee meetings held (Minutes). Mid-term evaluation completed in June 2021 Final evaluation. Projection Q2 2023

III. Project Risk Management

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

	(i) Risks at CEO stage	(i) Risk level FY 21	(i) Risk level FY 22	(i) Mitigation measures	(ii) Progress to-date	New defined risk ⁴
1	Delay in the approval of the proposed regulations for the planning and	Medium	Low	The development of official guidelines, prior to the elaboration of full regulations, is expected to ensure faster approval. The institutional capacity building	In close coordination with PRODUCE a national consultant is preparing a set of policy-related recommendations based on policy gap analysis carried out by the	<input type="checkbox"/>

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

	management of sustainable industrial zones			component of the project will provide training to the government and other stakeholders and may reduce the risk.	project in 2021 Recommendations will be further analysed and implemented by PRODUCE.	
2	Lack of participation of representatives from the government, industrial zone environment committees and businesses in the trainings and / or reluctance to transfer the knowledge to other stakeholders.	Low	Low	Competences gained in the training encompass a variety of technologies, planning and environmental protection approaches; these represent a competitive advantage for the careers of the representatives trained. The endorsement from the respective institutions and the thorough selection criteria for the participants and instructors may reduce the risk.	A number of awareness-raising seminars and capacity building activities were carried out. The local government is already involved in the project implementation. Representatives of the national and local authorities actively participate in the PSC and project activities. The target indicators are achieved in 90%.	<input type="checkbox"/>
3	Reluctance from companies to collaborate with the Regional Government of Callao and other public entities to engage with the PMU	Medium	Low	The PMU will offer sub-contracting opportunities for local companies in areas such as facilities management and environmental consulting, which will help incentivise companies to join the registry and improve their collaboration with the regional authorities.	Three industrial associations have actively supported the dissemination of the benefits of the project for the industry and the environment and have organized meetings with companies' top management to motivate industries to participate in the project.	<input type="checkbox"/>
4	Limited number of companies willing to be assessed and interested in clean technology investments.	Low	Low	Baseline data and information on companies already gathered in the project formulation phase. This, along with dissemination workshops on opportunities for companies, should facilitate the recruitment and reduce the risk.	To date, 55 companies signed commitment letters, and 20 companies receive RECP technical assistance.	<input type="checkbox"/>
5	Limited interest in investing in socio-economic projects that change core processes of the firm.	Low	Low	Suitable experts on socio-economic projects involving clean and low-carbon technologies will elaborate cost-benefit analysis together with the company's management, to illustrate the benefits of implementing such projects.	Local government have identified seven socio-economic projects. However implementation is not yet planned. The project will support the Local Government throughout PRODUCE to facilitate the decision making process to start socio-economic projects implementation.	<input type="checkbox"/>
6	Delay in the selection of the stakeholders to implement the awareness-raising component may affect the dissemination of results.	Low	Low	Support from the central government in the establishment of criteria for the selection of stakeholders will reduce the risk.	Stakeholders in the public and private sectors helped to identify and communicate with local companies in Callao. The PMU works with the private and public authorities providing carry out awareness-raising seminars to companies in Callao to showcase the benefits of the EIP Approach. (Gobierno Regional del Callao, Sociedad nacional de Industrias, Cámara de Comercio de Lima, Asociación de Exportadores, Cámara de Comercio Peruano Suiza, Cámara de Comercio Alemana, Ministry of Environment, Ministry of Production, Reciclame Peru, among others).	<input type="checkbox"/>
7	Lack of sufficient financial resources for investments in clean and low-carbon technologies.	Medium	Medium	The project envisages a variety of financing sources for companies including green credit lines or bank guarantees (in case of insufficient collateral), which should help improve creditworthiness and should reduce the	An assessment of financial and non-financial mechanisms to implement low carbon and uPOPs technologies was carried out. The financial sector in Peru does not offer green financing mechanisms.	<input type="checkbox"/>

				<i>risk of limited access to finance.</i>		
8	<i>Skilled and/or properly trained labour to operate and maintain the clean & low-carbon technology not available.</i>	Low	Low	<i>The implementation of the new technologies will be accompanied and supervised by the technology suppliers. Emphasis will be put on training to ensure that workers can operate and maintain the technology properly. A Technical Unit will provide continuous support to companies.</i>	<i>Meetings were held with suppliers where they presented the offers of clean technologies in the industry; this will be used later when the type of project to be financed in the companies is known.</i>	<input type="checkbox"/>
9	<i>Delays in project implementation and/or low-quality performance.</i>	Low	Low	<i>Following carefully the established monitoring and evaluation plan will allow for timely implementation and high-quality results.</i>	<i>Despite the delays in implementation, the Project activities are carried out effectively. Some output indicators and are already being achieved.</i>	<input type="checkbox"/>
10	<i>Increased rainfall due to climate change causes flooding and damages newly-installed equipment</i>	Low	Medium	<i>Climate considerations will be made when selecting locations for installing equipment in companies.</i>	<i>The pilot zone of Callao did not have major weather events that could cause damage to industries in the latest years. However, there is a Disaster Risk Prevention and Reduction Plan of the Provincial Municipality of Callao, which is an instrument of the National Disaster Risk Management Policy.</i>	<input type="checkbox"/>

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

N/A

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

The COVID-19 pandemic has hit Peruvian companies hard. The Government of Peru has issued a Supreme Decree that approves the gradual and progressive restart of economic activities in the framework of the National Health Emergency declaration.

Through Supreme Decree No. 058-2022-PCM, published in May 2022, the government of Peru extended the declaration of the National Health Emergency. Thus, for the development of different activities, the 3 doses of the vaccine must be accredited due to the serious circumstances affecting the lives of people as a result of COVID-19. As a measure to prevent the spread of COVID-19.

The project staff has carried out all activities in full adherence to the national emergency declaration of COVID-19. The PMU has resumed face-to-face work at PRODUCE offices and companies have been contacted again to participate in the project. Since activities in Peru have been fully reactivated, communication with the companies has improved, but it is still necessary to follow the safety protocols that require constant COVID-19 testing in order to carry out the visits.

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

Most of the activities and products have been implemented as planned even some of them with small delays. However, the project includes a financial mechanism to co-finance the low carbon and uPOPs technologies in companies in the industrial zone. The mechanism and procedures for the co-financing mechanism were completed during the first half of 2022. Since PRODUCE is the implementing agency, the co-financing mechanism should be managed under PRODUCE procedures and regulations, which implies the co-financing mechanism has to be approved as a Supreme Decree, which involves an administrative procedure

that will last longer than expected. This situation could lead to delays in granting the co-financing to companies. Therefore, delaying the monitoring of the project's environmental impact. Even if most activities will be finalized as planned the co-financing mechanism approval may lead to the need extending the project period to implement this activity only

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

The project was initially delayed in implementation due to the need of signing an implementation agreement between PRODUCE and UNIDO. Later, it was delayed by the Covid-19 pandemic. This generated losing contact with the beneficiary companies and as a consequence in the timely achievement of results. Moreover, the design of the project suffered from gaps in information regarding the baseline and the distribution of emissions between companies in Callao, and there are vulnerabilities in the strong dependence and the participation of higher emissions industries in the Callao sector. Despite these difficulties, the project currently has a consolidated strong Management Unit and the initial difficulties have been overcome, although some re-definitions must be done regarding the project emission targets and implement strategies to address the current barriers and move towards the achievement of the project goals.

Regarding the progress to the project goals, efforts have been focused on achieving changes in RECP for the efficient use of resources and cleaner production. The project is providing technical support to companies in the Callao Industrial Zone. Fifty-five companies agreed to assess its potential for reducing CO₂ and U-POPS emissions, 51 have been analysed by carrying out in-depth in plan assessments to identify options for emission reduction. In the last PSC, it was approved to readjust the CO₂eq targets of the project to realistic targets, which will allow to demonstrate the success of the project.

There is progress in strengthening local capacities to make available industrial zone pollution information, through the updating of a PRODUCE database that will make it possible to have data on processes and emissions. The project is also consolidating a roster of experts on identifying CO₂ and uPOPs emission reduction opportunities for industry. On the other hand, financial support mechanisms for industries were identified, and work is being done to strengthen promotion of financial mechanisms at the national and local levels.

Considerable progress has also been made in training activities, including achievements in gender goals, where the project is also performing satisfactorily.

To date, adequate monitoring is carried out by the PMU, UNIDO and PRODUCE, including periodic meetings, monitoring of indicators and generation of relevant information, as well as technical evaluation of the products.

IV. Environmental and Social Safeguards (ESS)

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

Category A project

Category B project

Category C project

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

Please expand the table as needed.

	E&S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
(i) Risks identified in ESMP at time of CEO Endorsement			
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)	<i>Delay in the implementation of technologies in the project companies</i>	<i>Investments should be prioritized according to the most significant economic, environmental and social benefits.</i>	<i>No yet started.</i>

V. Stakeholder Engagement

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

A national consultant has updated the SI2 key stakeholder mapping resulting in a better understanding and engagement of stakeholders in the project execution. One of the results is that all members of PSC are actively participating in the meetings scheduled until September 2021, an effective approach to business associations, local governments (Callao), academia, and companies from different sectors were also achieved. All relevant stakeholder participate actively in the project implementation process.

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

The local government has actively participated in the Project Steering Committee, meetings, training, and different events carried out.

Three industrial associations have actively supported the dissemination of the benefits of the project for the industry and the environment and have organized meetings with companies' top management to motivate industries to participate in the project.

The GEF Focal Point has participated in all meetings and awareness-raising activities.

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

Please list here the documents which will be submitted in addition to the report, e.g.:

- Project Steering Committee minutes*
- Aide Memoire*
- Meeting Agenda, etc.*

VI. Gender Mainstreaming

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

The Project Management Unit is made up of 2 women (Technical Coordinator and Assistant). As reported

in the MTR: In the industrial sector, with little historical presence of women this should be understood as an achievement of the project.

Regarding the performance, the project foresaw a series of gender indicators in its activities that are being considered. The project has been complying with the minimum proportion of women (30%) in its training activities in cleaner production, low carbon, and rational management of chemicals, and ZIS planning and management. The goals that remain to be met include gender-specific courses and the consideration of the gender dimension in the roadmap documents for the development of ZIS and in the policy instruments when these are generated.

VII. Knowledge Management

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

Training in sustainable industrial zone management modules have been carried out successfully, which consisted of a 2-hour Seminar "International Best Practices for the Establishment and Management of Sustainable Industrial Zones" for government officials and private sector representatives (directors, managers), with a total of 35 participants; and a 10-hour Training in "Development and Management of Sustainable Industrial Zones" for government officials, representatives of industrial associations, NGOs and universities, with a total of 31 participants.

In July 2021, a training course was held on Energy Efficiency in auxiliary services in the industry, with a total of 30 participants from project companies (4% women and 96% men).

The consultancy for the ZIS Management Model in Peru, which will develop a proposal for a ZIS Management Strategy in Peru, includes 3 participatory workshops: i) The first Workshop was held on March 17, 2022, ii) The second workshop was held on April 28, 2022, and iii) The third and last workshop is scheduled for July 20, 2022.

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

Please list the relevant knowledge management mechanisms/tools and any documents that will be submitted in addition to the report, e.g.:

- *PMU Training reports*
- *G-Drive SIZ Perú*
- *Flyers*
- *UNIDO Open Text*

All attachments are to be named as per the GEF required format, i.e.: "GEFID_Document Title", e.g. 9714_Flyer.

VIII. Implementation progress

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

Progress:

Although during 2020 and 2021, the PMU sustained the modality of home-based work and limited mobility in all project activities due to the impact of the COVID-19 pandemic in Peru; project activities were mainly focused on policy assessment, policy development, and capacity building in which progress has been seen. Activities related to site visits and technical assessments of uPOPs and low carbon technology which started

in February 2021 have resulted in 20 companies having an RECP technical report.

In 2022, COVID-19 conditions improved in Peru and the PMU switch to face to face meetings and partial attendance to the PRODUCE office. As a result of the improved COVID conditions and the flexibility to visit companies and hold meetings more companies are interested in participating in the GEF SIZ Peru project. Therefore, significant progress has been achieved thanks to the strong support and commitment of the executing agency at PRODUCE and all national and international stakeholders.

Component 1 Policy framework for sustainable industrial zone development

The project team carried out an assessment to identify update needs in the current regulatory framework. The assessment included an analysis of stakeholders' roles and responsibilities in industrial zones, a gap analysis of existing regulations and policies for planning and management of sustainable industrial zones. The results highlighted that while there is an extensive regulatory framework for environmental pollution of industry in Peru with limited enforcement, there aren't specific policies or regulations for industrial zones development, which becomes one of the major constraints to promote sustainable development of industrial zones. In the validation workshop held on Dec 10, 25 participants from public and private sectors (MINAM, PRODUCE, MINCETUR, MEF, VIVIENDA, PCM, CCL, SNI) showed interest in contributing with their knowledge and experience to develop updated regulations for SIZ development.

An update of the key stakeholders' mapping was carried out in 2020 to identify the interest and relevance as well as the capacity needs for capacity strengthening. The re-launching event for the SIZ Project was carried out attracting more than 100 participants from the public, private, and academic sectors.

National consultants carried out an assessment to identify projects and programs promoting financial and non-financial incentives related to promoting low-carbon, clean technologies. Industrial incentives in Peru focus on productivity, innovation, exports however incentives are not linked to promoting environmentally friendly industrial development. However, there are favourable both nationally and internationally conditions to promote and establish in Peru financial and non-financial incentives for uPOPs and low carbon technologies.

The assessment was carried out based on secondary information sources, and online interviews, meetings, and workshops. While there was, in all cases, participation of relevant stakeholders interaction and feedback was challenging due to the online platform's capacities. The increase of online meetings invitations to relevant stakeholders, as a result of teleworking, imposed limitations on the duration of workshops. The team optimized the workshops time duration by investing longer preparation hours and promoting higher interaction such as surveys, online dashboards, or whenever splitting participants into small groups.

A national consultant designed an environmental information system, based on a diagnosis, forms, and reports for environmental information related to environmental management instruments. This system will be managed by PRODUCE and will have information accessible to any institution.

A consultancy was carried out on a regulatory proposal for the definition of sustainable industrial zones.

A consultancy was developed to elaborate on three proposals for non-financial incentive mechanisms for the development of ZIS, which ended in June 2022.

Component 2. Capacity building on sustainable industrial zone planning

The capacity gap analysis and the policy assessment showed the need for carrying out specialized training for government officials, company employees, and industry service providers to improve the understanding of the benefits of SIZ development. The following training activities were carried out.

In 2020, 45 hours of online training on "Resource Efficiency and Cleaner Production (RECP)", 10 training modules carried out to selected national consultants from industrial service providers, academia, and research centres (29% women and 71% men, 21 in total). A 40 hours online training course on "Cleaner Production Voluntary Agreements (APL+)" was carried out successfully, attracting 18 participants from the public and private sectors (50% women and 50% men). "Sound chemical management training" was carried out with 32 participants (42% women and 53% men) from the public, private and academic sectors, 7 training modules.

In June 2021, training in sustainable industrial zone management modules was initiated, which consisted of a 2-hour Seminar "International Best Practices for the Establishment and Management of Sustainable

Industrial Zones" for government officials and private sector representatives (directors, managers), with a total of 35 participants (51% women and 49% men); and a 10-hour Training in "Development and Management of Sustainable Industrial Zones" for government officials, representatives of industrial associations, NGOs and universities, with a total of 31 participants (48% women and 52% men).

In July 2021, a training course was held on Energy Efficiency in auxiliary services in the industry, with a total of 30 participants from project companies (4% women and 96% men).

Currently, the consultancy on the SIZ Management Model is being completed, in which a proposal for a SIZ management strategy in Peru is being developed. This consultancy includes three participatory workshops, two of which were held in March and April, and the last one will be held in July.

All training sessions were organized online. International and national experts invested extra efforts in developing supporting tools for the teaching-learning process and implemented participative training. Participants were separated into small working groups to carry out analysis and solve exercises for presenting results in plenary sessions. Individual assignments demonstrated to be a less successful approach.

Component 3: Pilot demonstration of clean and low-carbon technologies

National consultants updated the project baseline on uPOPs and CO₂eq company emissions in the Callao Industrial Zone. Updating of local relevant stakeholders and emissions baseline was instrumental to identify and engage Callao companies with high emission reduction potential to participate in the project. The PMU reached out to 200 industrial companies in Callao, held 150 virtual meetings with company representatives to present the project approach and benefits, out of them, 55 companies signed letters of interest to participate in the project.

A national consultant carried out an assessment to evaluate of POPs-NI and CO₂-eq emission reduction potential in companies through quick technical visits and analysis of information. The visit report included the identification of the types of technologies currently used and the technological upgrade options that can be implemented to reduce POPs-NI and CO₂-eq emissions.

A consortium of one international and one national company trained 20 national consultants, from which 11 consultants were selected for RECP technical assistance work with the companies. In February 2021, activities began with 20 prioritized companies to identify uPOPs and low carbon technology upgrading opportunities. The 20 prioritized companies have final RECP reports that include the RECP plan with the prioritized measures, as well as the follow-up and monitoring plan of the activities that have been carried out until December 2021, so that they can apply for possible project financing at the end of 2022. The results obtained are as follows:

- Improvement measures identified: 166 measures
- Emission reductions if the measures are implemented: 5,565 tCO₂/year and reduction of COP -NI: 0.35 gEQT/year.
- Total estimated economic savings: S/. 8.8 million per year.

Through coordination between the PMU and the prioritized companies, proposals have been requested from suppliers of the suggested technologies. The completed feasibility studies will be the base document for the companies to apply for the project's non-reimbursable funds.

A national consultant developed a communication strategy for the project that generated visibility guidelines, and a project website was created with relevant information on project implementation. This consultant included the brand manual, which has been used permanently for project communications. Several online awareness-raising events were held.

Through the Callao Project Mapping consultancy, 5 public investment projects were previously identified that have the potential to benefit the population in socioeconomic aspects. In December 2021, the consultant began to develop the terms of reference for the elaboration of profiles or feasibility studies (financed by the project) in the environmental component that contributes to the enhancement of the benefits of these projects in Callao. Currently, the terms of reference of the projects prioritized for Callao are already available, so that the feasibility studies or profiles previously mentioned can be contracted.

The proposed financial mechanism and co-financing manual for cleaner and low-carbon technologies sets forth the conditions and procedures for the delivery of the non-refundable fund to potential beneficiary companies.

The bases and instructions for use of the non-reimbursable fund were defined; these documents must be reviewed and approved by the project's steering committee or the committee in charge of selecting technology investment projects.

In parallel, the bidding process for the administration of the non-reimbursable fund has been prepared and published by UNIDO so that proposals can be received from potential national bidders who will be responsible for the administration of the fund.

Component 4: Monitoring and Evaluation

A national consultant oversees the monitoring and evaluation of the project in accordance with GEF and UNIDO requirements and monitoring of project indicators.

A mid-term review was carried out in May 2021 with the participation of an international and national consultant. The purpose of this external mid-term review was to provide the project management team with feedback on the project's performance to date and to identify early risks to project sustainability, effectiveness, efficiency, and progress towards results, including gender mainstreaming.

There is also a weekly progress report for PRODUCE and UNIDO, as well as annual and semi-annual reports for UNIDO, in addition to the reports that are regularly prepared at the request of PRODUCE to verify progress. On a quarterly basis, an update of the project's financial execution is made in an Excel table attached to the project's Annual Work Plan.

Meetings of the Project Steering Committee (PSC) are held every six months or in extraordinary sessions, where both the progress of the project and proposals for implementation strategies that require high-level decisions are discussed.

Challenges:

Due to the conditions of the Covid-19 pandemic in Peru, the implementation of activities took longer and requires more resources. In addition, the current situation of the country caused delays companies responses and makes communication difficult. Company visits and face-to-face activities required constant COVID-19 testing, and complicated procedures, and lengthened the waiting time for consultants to be admitted to companies.

Access to technology providers and completing the feasibility studies has been a challenge due to the global scarcity of electronic components. Delays in the establishment of the co-financing mechanism due to complex governmental procedures may cause delays in granting economic resources to companies.

Outcomes:

A regular meeting of the Project Steering Committee was held in September 2021, with the active participation of all members, in which the activities carried out to that date and the goals achieved in each of the 4 components were explained and they accepted the proposal to expand areas.

The Mid-term evaluation was carried out and the report provided good suggestions to improve the project implementation process.

A bidding process has been done to establish a trust fund to finance the upgrading of environmentally friendly technologies in the companies. Contract with the financial institution will be issued in July 2022.

National consultants trained under the project conducted 20 company assessments to identify the need to upgrade uPOPs and CO2eq technologies.

In March 2021, a new call for companies was launched, especially in the foundry sector, resulting in 55 signed letters of agreement and confidentiality.

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

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

<input type="checkbox"/>	Results Framework	NA
<input type="checkbox"/>	Components and Cost	NA
<input type="checkbox"/>	Institutional and Implementation Arrangements	NA
<input type="checkbox"/>	Financial Management	NA
<input type="checkbox"/>	Implementation Schedule	<i>One-year extension, year of project completion 2023.</i>
<input type="checkbox"/>	Executing Entity	NA
<input type="checkbox"/>	Executing Entity Category	NA
<input type="checkbox"/>	Minor Project Objective Change	NA
<input type="checkbox"/>	Safeguards	NA
<input type="checkbox"/>	Risk Analysis	NA
<input type="checkbox"/>	Increase of GEF Project Financing Up to 5%	NA
<input type="checkbox"/>	Co-Financing	NA
<input type="checkbox"/>	Location of Project Activities	NA
<input type="checkbox"/>	Others	NA

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

Project components	GEF Fund (USD)	
	Budget	Expenditure
Component 1 – Policy framework for sustainable industrial zone development	235,000	242,717.56
Component 2 – Capacity building on sustainable industrial zone planning	315,000	475,924.04
Component 3 – Pilot demonstration of clean and low-carbon technologies	889,000	475,924.04
	2,280,000	56,156.94

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

Component 4. Monitoring and Evaluation	200,000	65,536.16
Project management	195,000	180,736.27
Total (USD)	4,114,000	1,496,995.01

IX. Work Plan and Budget

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

Please fill in the below table or make a reference to a file, in case it is submitted as an annex to the report.

Outputs	Total Budget	2018	2019	2020	2,021	2022 T1	2022 T2	2022 T3	2022 T4	2023 T1	2023 T2
C.1: Policy framework for sustainable industrial zone development	235,000	24,599.50	12,936.26	42,591.74	116,717	14,510	10,000	5,000	10,000	25,000	0
1.1.1 Regulation, planning aids, policies	154,500	24,599.50	12,936.26	39,102.35	109,990	4,510	5,000	5,000	5,000	15,000.00	-
1.2.1 Proposal for mechanisms/ incentives	80,500	0.00	0.00	3,489.39	6,728	10,000	5,000	-	5,000	10,000.00	-
C.2: Capacity building on sustainable industrial zone planning	315,000	13,973.78	2,907.74	24,404.80	180,672	17,000	10,000	10,000	10,000	32,000	20,000
2.1.1 Training modules for SIZ planning	58,300	5,670.99	1,157.74	1,735.76	40,949	17,000	-	-	-	-	-
2.1.2 RECP training modules	80,200	0.00	0.00	16,326.85	76,069	-	-	-	-	-	-
2.1.3 Sound chemical management training	67,400	0.00	0.00	6,342.19	53,601	-	-	-	-	-	-
2.1.4 Update database of consultants	12,500	0.00	0.00	0.00	-	-	-	-	-	7,000	-
2.2.1 Technical Unit for SIZ development	96,600	8,302.79	1,750.00	0.00	10,053	-	10,000	10,000	10,000	25,000	20,000
C.3: Pilot demonstration of clean and low-carbon technologies	1,069,000	22,081.02	11,320.12	85,940.37	367,951	101,000	130,000	70,000	82,391	85,000	40,000
3.1.1 Feasibility studies and assessment	587,700	21,081.02	11,320.12	61,074.67	276,202	31,000	100,000	50,000	57,391	45,000	-
3.2.1 Inclusive socio-economic projects	110,000	0.00	0.00	0.00	19,315	10,000	10,000	10,000	15,000	20,000	20,000
3.3.1 Public awareness and events	191,300	0.00	0.00	24,865.70	58,151	10,000	5,000	10,000	10,000	20,000	20,000
3.4.1 Access to alternative finance	180,000	1,000.00	0.00	0.00	14,283	50,000	15,000	-	-	-	-
C.4: Monitoring and Evaluation	200,000	0.00	0.00	13,392.37	51,098	0	0	20,000	20,000	20,000	52,097
4.1.1 Monitoring & evaluation mechanism	200,000	0.00	0.00	13,392.37	51,098	-	-	20,000	20,000	20,000	52,097
PMC	195,000	19,850.11	5,307.41	51,269.83	162,665	20,000	12,000	0	0	-	0
Project Management Cost (PMC)	195,000	19,850.11	5,307.41	51,269.83	162,665	20,000	12,000	-	-	-	-
Total	2,014,000	80,504.41	32,471.53	217,599.11	879,105	152,510	162,000	105,000	122,391	162,000	112,097
Trus fund for companies:	2,100,000										

X. Synergies

1. Synergies achieved:

National Circular Economy Roadmap: The Ministry of Environment in cooperation with the Ministry of Production, is currently implementing the National Circular Economy Roadmap, which focuses on the sustainable development of industries. It will contribute to fostering policy dialogue and awareness-raising on sustainable industrial zones.

Eco-Industrial Parks: The elaboration of a national project on eco-industrial parks is ongoing and was launched in March 2021. It will create synergies with the current GEF project in capacity building and creating a policy framework for sustainable industrial zones.

Environmental information system: The project developed an information system based on company environmental assessments and reporting. This system will be managed by PRODUCE and will have accessible information to any institution

3. Stories to be shared (Optional)

EXPLANATORY NOTE

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

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

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

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