

TERMINAL EVALUATION

Project ID:	9079
Project Name:	Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with Their Final Disposal
Countr(ies):	Honduras
Implementing Agency:	UNDP

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I. Overview

A. Description

Project name

Environmentally Sound Management of Products and Wastes Containing POPs and Risks Associated with Their Final Disposal

Country

Honduras

GEF ID

9079

Implementing Agency

UNDP

Executing Entity

The Ministry of Energy, Natural Resources, the Environment and Mines (SERNA)

Trust Fund

GET

Project Type

FSP

Objective

To minimize global impacts and risk to environment and to human health in Honduras, enhancing Environmentally Sound Management of POPs (both, original and new), by implementing PPPs, enforcing regulations and introducing institutional models to control new-POPs pesticides, PBDEs and PCBs disposal, unsound solid waste management and unsound management of Health Care Waste (HCW)

B. Key Dates

CEO Endorsement/Approval

11/9/2017

Agency Approval

9/19/2018

Implementation Start

9/19/2018

First Disbursement

7/4/2019

Expected MTR

5/9/2021

MTR Submission

6/1/2026

Actual MTR

10/1/2021

Expected Completion

9/19/2024

Actual Completion

11/26/2025

Actual TE

3/12/2025

TE Submission

6/1/2026

Final Disbursement

C. Disbursements

Project Financing
3,788,700.00

Cumulative Disbursement
3,454,071.01

II. PROGRESS STATUS AND ISSUES

A. Main Terminal Evaluation Findings

Design

The project was prepared with the participation of key actors and contained a clear strategy with respect to strengthening the institutional framework whose purpose was to obtain effective compliance with regulations and update existing ones to achieve greater integration between institutions in order to have a better management of chemical substances and POPs in the country.

However, these objectives are blurred in the results framework, mainly due to ambiguous performance indicators, where several of them correspond to desired outputs rather than to a use of those inputs. In addition, the project's governance scheme lacked technical committees that could clear up the technical aspects in the JDP's discussions and that would allow this body to focus on the strategic issues of the project.

The goal of reducing dioxins and furans seems very ambitious for a project of only five years and very limited resources, since the implementation of community enterprises needs constant support so that they can persevere over time.

Attainment of Results

The grade for overall achievement of results is estimated as 'Moderately Satisfactory'.

Overall, the documentation reviewed and interviews indicate that the project has made significant progress in the elimination of POPs and other toxic wastes in cement kilns, as well as in the development of RSD management plans in four prioritized municipalities (Tegucigalpa, Comayagua, Potrerillos, and COLOSUCA). In fact, it is estimated that the elimination of POPs will be 98.5 tons once the PCB-contaminated carcasses are exported for final disposal in Europe during the first quarter of 2025. Although the elimination of PDBE in the transport sector could not be carried out as a result of the COVID-19 pandemic, an additional 76 tons of expired pesticide residues are in the process of being eliminated and will also be processed in CENOSA's cement kilns during the first quarter of 2025. Regarding of the reduction of dioxins and furans (25 g-EQT/year or its equivalent to 5,000 tons/year of municipal waste processing) by improving the management of RSD (recovery and recovery of the recyclable fraction) in the prioritized municipalities (4) and community commercial enterprises (9), it is estimated that this goal will not be met due, firstly, to the extremely ambitious nature of this goal established in Prodoc and, secondly, to the fact that the facilities in the municipalities and communities are not finished or in operation, and there are significant challenges for community organizations in terms of their financial, technical and negotiation capacities. The reductions reported by the project are estimates of reductions that would occur once the ventures are operational and functional.

The institutional strengthening provided to different organizations and institutions in the country and the preparation of regulatory and normative proposals to improve the management of waste and chemical substances contributed to raising awareness of the importance of safe management of this type of pollutants, and the GoH institutions are now responsible for promoting the approval and application of the proposals left

by the project, as well as management plans for CESCO and greater inter-institutional integration and updating the curricula on chemical substances in basic and secondary education.

The project carried out a great deal of preparation work for the curricular update in DECOAS and SEDUC, estimating that in the course of 2025 the curriculum of basic and secondary education could be updated, since the last one was carried out in the year 2000. At the higher education level, the project achieved its objective at the postgraduate level in three universities and there are possibilities for expansion to three others.

The development of collaborative schemes with national institutions, private companies, local authorities and communities has been very successful, managing to awaken the interest of these actors in the improvement of the management processes of municipal DSRs, the activation of small community enterprises to implement R&R schemes and waste valuation. These collaborative schemes are also reflected in master plans for municipalities, formalization of community groups and their relationship with recycling companies in the sector and agreements with CENOSA and Argos for processing hazardous waste in general (GWP, plastics, textile fibers, tires, etc.) in their kilns

With respect to the master plans and their potential for household waste management, their execution requires very high financing and their results will be observed mainly in the medium and long term, if there are resources available for these purposes.

Execution

The implementation of the project was strongly affected by the continuous rotation of authorities and public officials (2018-2021), as well as by the introduction of administrative measures (e.g. the transfer of the project to the Presidential Office for the Green Economy (OPEV)) that resulted in notorious delays in the project's activities. The PMU was fully constituted in 2021, mainly affecting the implementation of Components 2 and 3. The lack of local supply of specialized professional services was another important factor that threatened the proper progress of the project. With respect to the COVID-19 pandemic and the delay in the first disbursement of the project, it is considered that these factors aggravated the problems mentioned above and that had been occurring much earlier, resulting in a real duration of the project close to 78 months instead of the 60 initially planned.

Despite the above, it should be mentioned that practically the actual execution of the project was carried out in 3.5 years, so its adaptive management was adequate, but it was observed that there were some decisions that depended only on the project, but that were not taken or executed in time (e.g., effective communication/integration with SERNA, the late formation of technical committees or the appropriate sustainability strategy) and that were independent of political conditions, the high turnover of authorities and key officials, and the limitations on mobility resulting from the global pandemic.

Financial Management

Financial management is considered to have been correct and in accordance with the standards required by UNDP. by 2024 the disbursements would reach USD 3.14 million and another USD 80 thousand would have been committed, so the remaining resources of the project would amount to USD 245 thousand by March 2025 (7.1% of the GEF budget).

With respect to co-financing, the actual counterpart contributions reach USD 27.9 million - this is 5% above of the expected contributions. The main contributors were cement companies (USD 17.2 million) and the GoH (USD 9 million).

Relevance and appropriation

The project clearly responds to national policies regarding the country's environmental management, as well as the UNDP-Honduras country document and the GEF guidelines. During the implementation of the project, there was a good acceptance of the project activities at the level of municipalities, communities, CESCO, CNG and the private sector. However, understanding as appropriation the adoption of the results of the project by the beneficiaries, this seems unlikely since there are no plans to scale up and replicate the results, as well as to continue with the processing of the regulatory projects left by the project.

Sustainability

Sustainability is considered 'Moderately Likely', mainly due to the financial aspects that have not been resolved by the institutions involved, especially with CESCO, whose current budget limits the possibilities of maintenance and operation of the equipment donated by the project, as well as the hiring of specialized personnel who can scale the number of annual analyses. The implementation of the PRTR also requires additional institutional resources to secure the system as such. The project will leave the platform for the PRTR, so that the entities that must report their emissions can do so online, but it will be necessary to incorporate personnel who are entirely dedicated to the development, maintenance and updating of the system and to review the quality, timeliness and consistency of the information provided by the reporting entities and require the rectifications that are necessary to validate these reports.

With regard to the CNG, its activities have also been financially supported by the project, so it would also be necessary for this body to have its own agenda and an adequate budget on the part of CESCO, to ensure a sustained operation so that it can fulfill its mission of discussion and creation of a regulatory framework for the rational management of chemicals and act effectively as a coordination and supervision body.

The productive chains have been positive and have generated great expectations among the participating communities. However, they present great challenges to maintain the existing business scheme, because the infrastructure of the facilities of the clean points and R&R stations are still precarious and need constant technical support and monitoring, due also to the weak preparation of these organizations from the technical point of view, negotiation capacity with institutions and other companies in the field and lack of banking penetration in some cases.

The interviews conducted during the project evaluation mission indicate that the sustainability of the project's actions is strongly dependent on the financing of a new version of the project (COPS5), so there is a very high external dependence for the development of future policies and actions to implement the country's chemicals and waste agenda.

B. Stakeholder Engagement

Transport sector

The IHTT worked with the project in the development of the project strategy for the proper management of PBDEs in the transport sector, including the revision of the PBDE waste calculation made during the project preparation phase. However, due to COVID-19, all transport activities were suspended, preventing the progress of this PBDE strategy, but finally the project to eliminate the 12 tons of waste containing these compounds was canceled, because it depended on the Pro-Renova project, whose resources were redirected to combat COVID-1922 .

Agreements with Mayors and Associations of Municipalities:

The project signed four inter-institutional cooperation agreements with municipalities to ensure support in technical assistance, basic equipment and provision of inputs to initiate local waste recovery actions. These municipalities were Potrerillos, Tegucigalpa and Comayagua, as well as with the Commonwealth of COLOSUCA.

Agreements with Recycling and Cooperation Companies:

The project signed agreements with pilot communities for the establishment of 5 clean points in the 4 cities of the project (including the Commonwealth). In Tegucigalpa, the company Reciclara Diamante has also expressed interest in supporting the financing of collection centers in the context of component 3.

Alliances with the cement sector:

The project reached an agreement with cement companies CENOSA and ARGOS for the coprocessing of hazardous waste, such as agricultural plastics, textiles, PCB oils and end-of-life tires, in the context of component 3 of the project. However, the activities that have made the most progress have been the elimination of PCBs and expired pesticide residues stipulated with CENOSA. At the time of the development of this ET, the formation of a governance mechanism and a management model for end-of-life tires was pending to formalize the management of end-of-life tires in the medium and long term where final disposal goals are projected, where co-processing is one of the alternatives identified with CENOSA and ARGOS. The latter has a roadmap and is estimated to be completed in December 2024.

Also, the project developed two feasibility studies for the start-up of two municipal solid waste separation stations in Tegucigalpa and Comayagua so that non-recyclable inorganic fractions can be co-processed in ARGOS, as part of the goals of increasing Waste-Derived Fuel from municipal RSDs, where ARGOS explores the possibility of financing at least one of these separation stations.

Agreements with universities

The project reached agreements with the National Autonomous University of Honduras (UNAH), UNITEC and UNACIFOR, with whom letters of intent were signed to integrate the management of chemical products into their academic programs. Diplomas and certificates in sustainable management of chemicals and waste were developed, with the participation of more than 250 students in the context of component 4. Work is also underway on a master's degree with UNITEC.

Cooperation with the Inter-American Development Bank (IDB)).

In partnership with the IDB, the construction of a new hospital waste deposit and the infrastructure of the autoclave-based treatment plant (financed by the project) at the University School Hospital of Tegucigalpa was financed, for the management of infectious hospital waste, which is in its completion stage.

C. Gender Equality

Although the project had a GEN=1, its activities benefited all the social groups that participated in the areas of intervention and had a preferential focus and sensitivity towards women, although this section could have been improved with a plan that included specific issues that affected women within the context of the project's problems. The project approached gender issues through the participation and empowerment of women leaders of community organizations, while being beneficiaries of the project's small investments and activities. The interviews conducted and the documentary review indicate that there was no specific gender plan, but that the activities focused on quantifying the number of men and women who participated in

training, entrepreneurship, awareness campaigns, etc. There is no gender baseline or adequate indicators to track progress in this area. A gender plan is a strategy for how a project addresses specific issues that affect women within the context of its implementation, a situation that did not occur in COPS4, but responded mostly to training on technical issues and awareness on the effects of POPs and other chemicals and waste on health and the environment.

To summarize this section, it can be concluded that significant efforts were made to incorporate the gender dimension within the actors participating in the project, but without achieving an effective integration of the issue within the problem of chemical substances.

D. Knowledge Management

The adaptive management of the project was adequate, but it was observed that there were some decisions that depended solely on the project, but that were not taken or executed in a timely manner (e.g., effective communication/integration with SERNA, the formation of technical committees, or the appropriate sustainability strategy) and that were independent of political conditions, high turnover of authorities and key officials, and the limitations on mobility resulting from the global pandemic. The project's sustainability strategy is still pending, which contains specific agreements and commitments from the relevant institutions to increase the possibilities of replication and scaling up of the experience, as well as the processing and approval of the proposals for regulations and standards left by the project.

III. Core Indicators

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	60.00	0.00	31.50

Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
Polychlorinated biphenyls (PCB)		60.00		31.50

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.3 Hydrochlorofluorocarbons (HCFC) Reduced/Phased out (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.4 Number of countries with legislation and policy implemented to control chemicals and waste (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.5 Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.6 POPs/Mercury containing materials and products directly avoided

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.7 Highly Hazardous Pesticides eliminated

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.8 Avoided residual plastic waste

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 10 Persistent organic pollutants to air reduced

Grams of toxic equivalent gTEQ (Expected at PIF)	Grams of toxic equivalent gTEQ (Expected at CEO Endorsement)	Grams of toxic equivalent gTEQ (Achieved at MTR)	Grams of toxic equivalent gTEQ (Achieved at TE)
	25.00	0.00	10.00

Indicator 10.1 Number of countries with legislation and policy implemented to control emissions of POPs to air (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 10.2 Number of emission control technologies/practices implemented (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

IV: Co Financing

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Anticipated at CEO(\$)	Materialized at MTR(\$)	Materialized at TE(\$)
Recipient Country Government	MiAmbiente, Ministry of Education, Municipalities	In-kind	Recurrent expenditures	4,230,201.00	1,250,000.00	7,326,110.00
Recipient Country Government	MiAmbiente, Ministry of Education, Municipalities	Grant	Investment mobilized	3,930,671.00	830,560.00	1,699,962.00
Private Sector	Argos Honduras, S.A de C.V., Cementos del Norte,	In-kind	Recurrent expenditures	12,702,033.00	1,870,000.00	6,139,276.00
Other	Argos Honduras, S.A de C.V., Cementos del Norte, S.A,	Grant	Investment mobilized	5,737,420.00	2,300,000.00	12,707,033.00
Total Co-financing				26,600,325.00	6,250,560.00	27,872,381.00

Comments

The actual counterpart contributions reach USD 27.9 million - this is 5% above of the expected contributions. The main contributors were cement companies (USD 17.2 million) and the GoH (USD 9 million). The review of the available documentation and the interviews indicate that most of these contributions are grants or investments followed by recurring expenses of the institutions (personnel, use of equipment, facilities, etc.). ENEE (which was not initially considered in the project) estimates its contribution at USD 800,000 for handling, removal, transport of equipment contaminated with PCBs and the construction of the company's hazardous waste warehouse. On the other hand, the School Hospital obtained a contribution from the IDB to build its infectious hospital waste treatment plant where the

project's autoclaves were installed (approx. USD 75 thousand). With respect to UNDP, ProDoc did not contemplate any contribution from this institution.

V: ENVIRONMENTAL AND SOCIAL SAFEGUARDS

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
		Medium/Moderate	Medium/Moderate

Measures to address identified risks and impacts

The project developed the Social and Environmental Assessment Procedure (SESP)), where the possible negative and positive effects that their activities could have on the communities where the interventions were developed were evaluated. This tool was applied in the process of elaboration and implementation of the COPS4, resulting in a 'low risk' project. This instrument focuses on the benefits that the disposal of expired POPs and pesticides in controlled and safe facilities will bring to marginalized communities and groups, but does not refer to the health risks for those beneficiaries of the project's entrepreneurship component, who collect municipal RSDs, separate them and compost from this waste.

This type of risk was not detected either in the initial SESP or in its updates, constituting a situation that will have to be taken care of in the short term to avoid health problems with these beneficiaries.

VI. ANNEX

Uploaded Document

Document Category	Prefix	Title
M and E Document	Terminal Evaluation (TE)	GEF9079_UNDP5615_FY26_TE_UNDP_Honduras_C&W_FSP