

# Eliminate mercury use and adequately manage mercury and mercury wastes in the chlor alkali sector in Mexico

Review PIF and Make a recommendation

## Basic project information

**GEF ID**

10526

**Countries**

Mexico

**Project Name**

Eliminate mercury use and adequately manage mercury and mercury wastes in the chlor alkali sector in Mexico

**Agencies**

UNEP

**Date received by PM**

3/22/2020

**Review completed by PM**

4/8/2020

**Program Manager**

Evelyn Swain

**Focal Area**

Chemicals and Waste

**Project Type**

FSP

## PIF

### Part I – Project Information

#### Focal area elements

1. Is the project/program aligned with the relevant GEF focal area elements in Table A, as defined by the GEF 7 Programming Directions?

#### Secretariat Comment at PIF/Work Program Inclusion

Yes, this project is aligned with the CW policy.

## Agency Response

### Indicative project/program description summary

2. Are the components in Table B and as described in the PIF sound, appropriate, and sufficiently clear to achieve the project/program objectives and the core indicators?

### Secretariat Comment at PIF/Work Program Inclusion

More information is needed on what will be done with the mercury being recovered from the old facility. How will the mercury be disposed of in accordance with the guidelines for environmentally sound management? The PIF indicates that 50 tons will be reused in South America. Article 3 paragraph 5b of the Minamata Convention states that mercury from the decommissioning of chlor-alkali should be disposed of in accordance with the guidelines for environmentally sound management.

ES, 4/7/20: Information has been provided that clarified that the proposed treatment of mercury is acceptable under the Minamata Convention. Comment cleared.

## Agency Response

**03March2020**

After consultation with the Global Mercury Partnership and the ZeroHg Working Group, Article 3, paragraph 5b applies to excess mercury coming from the decommission of chlor-alkali plants. Non-excess mercury can be used according to the allowable use definition of Article 2k, the Article 3.6 a) i) for the trade, and Article 5 for its use until the phase out date of 2025.

The CYDSA plant (90,000 ton capacity) currently purchases 9 tons of mercury per year to compensate mercury losses to air, soil and used catalyst. According to Chlorosur, the current chlorine production capacity using mercury cells in the Latin American region (Argentina, Brazil, Peru and Uruguay) is 385,000 tons which means approximately 38.5 tons of mercury are needed each year. Of the 120 tons currently in the cells of the Coatzacoalcos plant, 81,5 tons will therefore be excess mercury during the year of conversion.

However, the plant management has agreed to write off 100 tons of mercury (in-kind co-financing) which the project will stabilise. The additional 20 tons which is deemed to not be excess mercury as defined by the Article will be transferred to plants as a commodity in the chlorosur network in Latin America (all countries where chlorosur reports mercury-cell chlor-alkali plants are parties, thereby complying with Article 3.6 a)i)) and will replace approximately ½ year of their new needs in new mercury caused by evaporation in the mercury cells. Conditions of Article 5.2 will therefore be met as the mercury will be used before the phase out date.

The additional 45 tons of GEB come from the 9 tons CYDSA will not have to buy annually in the future.

The GEB is therefore composed of 100t permanently stabilised and 45t of avoided mercury.

The text of the PIF has been clarified in the description of component 3.

#### **Co-financing**

**3. Are the indicative expected amounts, sources and types of co-financing adequately documented and consistent with the requirements of the Co-Financing Policy and Guidelines, with a description on how the breakdown of co-financing was identified and meets the definition of investment mobilized?**

**Secretariat Comment at PIF/Work Program Inclusion** Yes, this project includes adequate co-financing, including financing for the conversion of the facilities.

#### **Agency Response**

**GEF Resource Availability**

**4. Is the proposed GEF financing in Table D (including the Agency fee) in line with GEF policies and guidelines? Are they within the resources available from (mark all that apply):**

**Secretariat Comment at PIF/Work Program Inclusion** Yes.

#### **Agency Response**

**The STAR allocation?**

**Secretariat Comment at PIF/Work Program Inclusion** NA

#### **Agency Response**

The focal area allocation?

**Secretariat Comment at PIF/Work Program Inclusion** Yes.

**Agency Response**

The LDCF under the principle of equitable access

**Secretariat Comment at PIF/Work Program Inclusion** NA

**Agency Response**

The SCCF (Adaptation or Technology Transfer)?

**Secretariat Comment at PIF/Work Program Inclusion** NA

**Agency Response**

Focal area set-aside?

**Secretariat Comment at PIF/Work Program Inclusion** Yes.

**Agency Response**

Impact Program Incentive?

**Secretariat Comment at PIF/Work Program Inclusion** NA

**Agency Response**

Project Preparation Grant

5. Is PPG requested in Table E within the allowable cap? Has an exception (e.g. for regional projects) been sufficiently substantiated? (not applicable to PFD)

**Secretariat Comment at PIF/Work Program Inclusion** Yes.

**Agency Response**

Core indicators

6. Are the identified core indicators in Table F calculated using the methodology included in the correspondent Guidelines? (GEF/C.54/11/Rev.01)

**Secretariat Comment at PIF/Work Program Inclusion** Yes.

**Agency Response**

Project/Program taxonomy

7. Is the project/ program properly tagged with the appropriate keywords as requested in Table G?

**Secretariat Comment at PIF/Work Program Inclusion** Yes.

**Agency Response**

**Part II – Project Justification**

1. Has the project/program described the global environmental / adaptation problems, including the root causes and barriers that need to be addressed?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes, this project will address the chlor-alkali sector in Mexico which is a priority under the Minamata Convention and includes external financing for the conversion of the two remaining mercury cell facilities.

**Agency Response**

2. Is the baseline scenario or any associated baseline projects appropriately described?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes, the baseline is appropriately described.

**Agency Response**

3. Does the proposed alternative scenario describe the expected outcomes and components of the project/program?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

4. Is the project/program aligned with focal area and/or Impact Program strategies?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes, this project is in line with the CW strategy.

**Agency Response**

5. Is the incremental / additional cost reasoning properly described as per the Guidelines provided in GEF/C.31/12?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes incremental cost reasoning is properly described.

### **Agency Response**

**6. Are the project's/program's indicative targeted contributions to global environmental benefits (measured through core indicators) reasonable and achievable? Or for adaptation benefits?**

### **Secretariat Comment at PIF/Work Program Inclusion**

See question above about the final treatment of mercury being recovered.

ES, 4/7/20: Information has been provided that clarified that the proposed treatment of mercury is acceptable under the Minamata Convention. Comment cleared.

### **Agency Response**

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Response provided in 2. above.

**7. Is there potential for innovation, sustainability and scaling up in this project?**

### **Secretariat Comment at PIF/Work Program Inclusion**

This project will address the entirety of the sector in Mexico but will include important lessons for other countries.

### **Agency Response**

**Project/Program Map and Coordinates**

**Is there a preliminary geo-reference to the project's/program's intended location?**

### **Secretariat Comment at PIF/Work Program Inclusion**

### **Agency Response**



## Stakeholders

Does the PIF/PFD include indicative information on Stakeholders engagement to date? If not, is the justification provided appropriate? Does the PIF/PFD include information about the proposed means of future engagement?

### Secretariat Comment at PIF/Work Program Inclusion

Yes, stakeholder engagement is included.

### Agency Response

#### 15/04/2020: UNEP RESPOSE -Answers to PPO comments below:

Description of the interaction with local communities have been added in the stakeholders table. The sites being in industrial estates, no indigenous communities are in the vicinity. A full stakeholder analysis and engagement plan will be developed during the PPG.

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### Gender Equality and Women's Empowerment

Is the articulation of gender context and indicative information on the importance and need to promote gender equality and the empowerment of women, adequate?

### Secretariat Comment at PIF/Work Program Inclusion

Gender mainstreaming is included in the project.

### Agency Response

#### Private Sector Engagement

Is the case made for private sector engagement consistent with the proposed approach?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes, this project closely works with the private sector.

**Agency Response****Risks**

Does the project/program consider potential major risks, including the consequences of climate change, that might prevent the project objectives from being achieved or may be resulting from project/program implementation, and propose measures that address these risks to be further developed during the project design?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes, risks are considered.

**Agency Response**

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ESERN has been added as Annex E

**Coordination**

Is the institutional arrangement for project/program coordination including management, monitoring and evaluation outlined? Is there a description of possible coordination with relevant GEF-financed projects/programs and other bilateral/multilateral initiatives in the project/program area?

**Secretariat Comment at PIF/Work Program Inclusion**

Yes, relevant coordination is included.

**Agency Response**

Consistency with National Priorities

**Has the project/program cited alignment with any of the recipient country's national strategies and plans or reports and assessments under relevant conventions?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes, this is in line with the Minamata Convention and national priorities.

**Agency Response**

**Knowledge Management**

**Is the proposed “knowledge management (KM) approach” in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations; and contribute to the project's/program's overall impact and sustainability?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes KM is an important aspect of this project.

**Agency Response**

**Part III – Country Endorsements**

**Has the project/program been endorsed by the country's GEF Operational Focal Point and has the name and position been checked against the GEF data base?**

**Secretariat Comment at PIF/Work Program Inclusion**

Yes.

**Agency Response**

**Termsheet, reflow table and agency capacity in NGI Projects**

Does the project provide sufficient detail in Annex A (indicative termsheet) to take a decision on the following selection criteria: co-financing ratios, financial terms and conditions, and financial additionality? If not, please provide comments. Does the project provide a detailed reflow table in Annex B to assess the project capacity of generating reflows? If not, please provide comments. After reading the questionnaire in Annex C, is the Partner Agency eligible to administer concessional finance? If not, please provide comments.

#### **Secretariat Comment at PIF/Work Program Inclusion**

NA

#### **Agency Response**

#### **GEFSEC DECISION**

#### **RECOMMENDATION**

Is the PIF/PFD recommended for technical clearance? Is the PPG (if requested) being recommended for clearance?

#### **Secretariat Comment at PIF/Work Program Inclusion**

Not at this time. Some questions remain.

ES, 4/7/20: There is the following comment from PPO:

the Agency stated that the following stakeholders had participated in consultations during the project identification phase: Indigenous Peoples and Local Communities - Civil Society Organizations; and Private Sector Entities. There's a very brief description on consultations with investors and academia (classified as civil society). However, there's no description on the consultations with indigenous peoples and local communities. Please note that the Policy requires that: 'Agencies provide a description of any consultations conducted during project development...' Please provide a more comprehensive description about the consultations that were conducted with those stakeholders

ES, 4/15/20: The agency has addressed the PPO comments and added information on local communities. This is an industrial project and will not impact indigenous peoples. PIF and PPG are recommended for technical clearance.

ADDITIONAL COMMENTS

Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.

Secretariat Comment at PIF/Work Program Inclusion

Review Dates

	PIF Review	Agency Response
First Review		
Additional Review (as necessary)		
Additional Review (as necessary)		
Additional Review (as necessary)		
Additional Review (as necessary)		

PIF Recommendation to CEO

Brief reasoning for recommendations to CEO for PIF Approval

This project will eliminate mercury use and manage mercury and mercury wastes in the chlor alkali sector in Mexico. Chlor alkali is a key feedstock for chlorine production which is used in many applications, including sanitizing the water supply. Older chlor alkali facilities use mercury cells containing hundreds of tons of mercury, but mercury free technology is commercially available. Under the Minamata Convention countries are required to discontinue mercury in this sector. The project will reduce negative impacts of mercury and mercury wastes from the chlor-alkali sector on human health and the environment in Mexico by supporting the decommissioning and conversion of the two remaining mercury chlor alkali facilities in Mexico and ensure the stabilization, treatment and disposal of excess mercury and contaminated materials from the two decommissioned and converted plants. Co-financing is already secured for conversion of the two facilities. As this is the first chlor alkali project supported by the GEF and a priority under the Minamata Convention, it will create important knowledge and communication materials for other countries to address their chlor alkali sector. The project will address 145 metric tons mercury, 53,700 metric tons contaminated material, and 43,186 metric tons CO<sub>2</sub>e.