# The World Bank

Implementation Status & Results Report

MEXICO Sustainable Energy Technologies Development for Climate Change (P145618)

# MEXICO Sustainable Energy Technologies Development for Climate Change (P145618)

LATIN AMERICA AND CARIBBEAN | Mexico | Energy & Extractives Global Practice |
Global Environment Project | Investment Project Financing | FY 2015 | Seq No: 6 | ARCHIVED on 28-Jun-2018 | ISR33150 |

Implementing Agencies: SENER, United Mexican States

# **Key Dates**

# **Key Project Dates**

Bank Approval Date:06-Mar-2015

Planned Mid Term Review Date:31-Jan-2018

Original Closing Date:31-Dec-2019

Effectiveness Date:21-Sep-2015

Actual Mid-Term Review Date:05-Mar-2018

Revised Closing Date:31-Dec-2019

# **Global Development Objectives**

Global Environmental Objective (from Project Appraisal Document)

The objectives of the Project are to improve the institutional capacity of ACE technology institutions (both public and private) in the territory of the recipient and to foster the commercialization of ACE technologies by providing financial incentives to the private sector, which together are expected to lead to GHG emissions reduction in the future.

Has the Global Environmental Objective been changed since Board Approval of the Project Objective?

## Components

Name

Public Disclosure Authorized

Regional Needs Assessments for ACE technologies and Clean Energy Regional Investment Plans (CERIPs):(Cost \$4.54 M)

Grants and technical assistance for private enterprises in the ACE sector: (Cost \$11.50 M)

Project Management:(Cost \$0.80 M)

# **Overall Ratings**

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<ul><li>Moderately Satisfactory</li></ul>	<ul> <li>Moderately Satisfactory</li> </ul>
Overall Implementation Progress (IP)	<ul><li>Moderately Satisfactory</li></ul>	<ul> <li>Moderately Satisfactory</li> </ul>
Overall Risk Rating	<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>

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# Implementation Status and Key Decisions

The project became effective in September 2015 and is now under full implementation. Status of the activities for the three components is as follows: (i) All ten Regional Assessments under Component 1 are completed, and an ex-post analysis of their outcome is underway, (ii) a total of nine subprojects supported by the incentives or *Premios* under Component 2 are now under implementation, and (iii) Project Management activities (Component 3) are underway.

## **Risks**

## **Systematic Operations Risk-rating Tool**

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance		<ul><li>Moderate</li></ul>	<ul><li>Moderate</li></ul>
Macroeconomic		Moderate	Moderate
Sector Strategies and Policies		Moderate	Moderate
Technical Design of Project or Program		<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>
Institutional Capacity for Implementation and Sustainability		Moderate	<ul><li>Moderate</li></ul>
Fiduciary	<del></del>	Moderate	<ul><li>Moderate</li></ul>
Environment and Social		Moderate	Moderate
Stakeholders		Moderate	Moderate
Other		Moderate	Moderate
Overall		<ul><li>Substantial</li></ul>	<ul><li>Substantial</li></ul>

# Results

# **Global Environmental Objective Indicators**

▶ Future emission reductions from ACE technologies supported by the Project(Metric ton, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	1,900,000.00	2,408,742.00
Date	30-Jun-2015	08-Dec-2017	19-Jun-2018	31-Dec-2019

### Comments

SENER provided an update for this indicator during the MTR. The 1.9 MtonCO2e are the **potential**, **future emission reductions** from those 9 projects that have been awarded with a Premio PRODETES after the first call for proposals. SENER estimated these reductions based on (i) the methodology outlined in annex 6 of the PAD and (ii) the actual technology that is being supported by the ACE program.

The team will provide further updates once the results of the third call for proposals, and the supported technologies, are known (late July

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#### 2018).

It should be noted that this update represents an estimation, and, as reported in the previous ISR, actual emission reductions would materialize only if the supported technologies are widely disseminated/commercialized.

# ▶ Private Capital Mobilized(Amount(USD), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value		0.00	0.00	6,000,000.00
Date		08-Dec-2017	19-Jun-2018	31-Dec-2019

#### Comments

Originally. this indicator was related to those resources for the ACE program or for programs or funds with similar objectives needed to replace the limited GEF resources that will be exhausted during the project. During the MTR, the Government and the team agreed to update this indicator to include both private and public resources not only for the ACE program but also for other Government programs or initiatives aimed at fostering clean energy innovation. SENER will provide an update for this indicator once the results framework is adjusted through a level-2 restructuring process.

# CERIPs designed and initiated(Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	16.00	32.00
Date	30-Jun-2015	15-Jun-2017	19-Jun-2018	31-Dec-2019

#### Comments

The Clean Energy Regional Investment Plans (CERIPs) are the key outcome of the Regional Assessments. As of March 8, 2018, 16 out of 32 had been completed. However, this indicator states that CERIPs must be designed and **initiated**. During the MTR, SENER explained that CERIPs will be completed and could be made public for informing policy makers, but that the ultimate decision of **initiating** them relies solely on State Governments, and thus out of the scope of PRODETES. For this reason, the team and the Government agreed to modify the description of this indicator as follows:

- CERIPs designed, published and disseminated.

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#### **Intermediate Results Indicators**

Number of investment o	opportunities identified in Componen	t 1 that receive funding through the	FSE (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	32.00
Date	30-Jun-2015	08-Dec-2017	19-Jun-2018	31-Dec-2019

#### Comments

The end target will be maintained as 32 but the description of the indicator will be modified as follows:

Number of high-relevance investment opportunities identified in Component 1 that could be potentially supported not only through the FSE but also from other national and/or international sources of financing.

The rationale for this modification is that PRODETES is responsible for identifying potential candidates to receive funding, but it is not responsible for the projects that are selected to be supported by FSE.

# ▶ Number of ACE program recipients identified from Component 1 (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	6.00
Date	30-Jun-2015	08-Dec-2017	19-Jun-2018	31-Dec-2019

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#### ▶ Number of recipients of TA (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	9.00	55.00	24.00
Date	30-Jun-2015	08-Dec-2017	19-Jun-2018	31-Dec-2019

#### Comments

In addition to the 9 awarded projects (5 from the first call for proposals and 4 from the second call), SENER prepared and delivered a number of workshops targeted to applicants for Premios PRODETES, including training on business model development and legal aspects. The actual indicator value includes those 9 awarded projects and 46 projects from research centers, universities, and private sector companies whose proposals were not selected but that received TA during the proposal preparation stage. This indicator will be updated once the results from the third call for proposals are available (end of July 2018).

### ▶ Number of patents for ACE technologies (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	3.00
Date	30-Jun-2015	08-Dec-2017	19-Jun-2018	31-Dec-2019

#### Comments

The description of this indicator will be modified as follows:

- Number of patents **or other industrial/intellectual property schemes** for ACE technologies. SENER has identified that at least three projects from the first call for proposals (Convocatoria 2016) can potentially apply for a patent or an equivalent industrial/intellectual property scheme. SENER will follow up and will provide TA for those candidates, and will also try to identify potential candidates from the second call for proposals (Convocatoria 2017).

#### ▶ Number of CCEC grants awarded (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	4.00	4.00	12.00
Date	30-Jun-2015	08-Dec-2017	19-Jun-2018	31-Dec-2019

#### Comments

The number of CCEC (Collaborative Clean Energy Commercialization) grants awarded was updated in the previous ISR. The current target (12 CCEC awards) was included in the PAD under the assumption that there would be a total of 24 grants, and 50% of them (12), would be CCEC, whereas the other 50% would be "prototype" grants. Based on observed progress for this demand-driven program (fewer grants but

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higher allocation per grant), SENER and the team agreed during the MTR to merge the CCEC grants and the prototype grants into one indicator, as follows:

- Number of incentives awarded, with at least 40% of them under the CCEC category. The target of this unified indicator would be 15, as opposed to 12 for the CCEC category and 12 for the prototype category. It should be noted that the allocated amount for these incentive remains as US 10.5 million.

# ▶ Number of prototypes completed (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target	
Value	0.00	0.00	0.00	12.00	
Date	30-Jun-2015	08-Dec-2017	19-Jun-2018	31-Dec-2019	

#### Comments

After the first and second calls for proposals (Convocatoria 2016 and Convocatoria 2017), there are 5 CCEC grants awarded and 4 prototype grants awarded (prototypes development is undergoing and thus none has been completed yet, as the indicator states). As explained in the CCEC indicator above, SENER and the team agreed during the MTR to merge the CCEC grants and the prototype grants into one indicator, as follows:

- Number of incentives awarded, with at least 40% of them under the CCEC category. The target of this unified indicator would be 15, as opposed to 12 for the CCEC category and 12 for the prototype category. It should be noted that the allocated amount for these incentive remains as US 10.5 million.

#### ▶ Number of female participants (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target	
Value	0.00	5.00	5.00	5.00	
Date	30-Jun-2015	08-Dec-2017	19-Jun-2018	31-Dec-2019	

### Comments

The target for this indicator has already been met (as reported in the previous ISR). Additionally, SENER will include female participants from the third call for proposals (Convocatoria 2018) once the outcome is available (end of July 2018). Also, SENER will report the number of female participants in all supported projects that have a relevant role in their corresponding organizational chart (where applicable).

#### **Overall Comments**

31-Dec-2019

31-Dec-2019

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06-Mar-2015

Effective

## **Data on Financial Performance**

# Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	Disbursed	t
P145618	TF-19403	Effective	USD	16.88	16.88	0.00	2.43	14.45	14%	6
Key Dates (by loan)										
Project	Loan/Credit/TF	Status	Approval Date	Signin	g Date	Effectiveness D	Date Orig.	Closing Date	Rev. Closing Date	

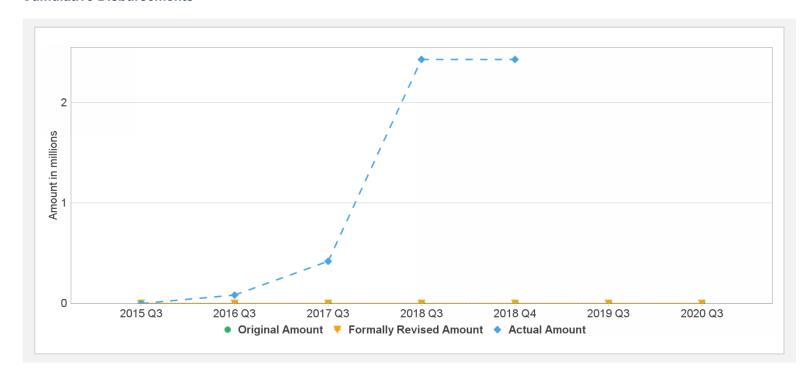
08-May-2015

21-Sep-2015

#### **Cumulative Disbursements**

TF-19403

P145618



# **Restructuring History**

Level 2 Approved on 06-Dec-2016

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# Related Project(s)

There are no related projects.