

INTEGRATED SAFEGUARDS DATA SHEET

APPRAISAL STAGE

Report No.: ISDSA7406

Date ISDS Prepared/Updated: 09-Apr-2014

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I. BASIC INFORMATION

1. Basic Project Data

Country:	Mexico	Project ID:	P145618
Project Name:	MEXICO Sustainable Energy Technologies Development for Climate Change (P145618)		
Task Team Leader:	Todd M. Johnson		
Estimated Appraisal Date:	07-Apr-2014	Estimated Board Date:	29-May-2014
Managing Unit:	LCSEG	Lending Instrument:	Investment Project Financing
GEF Focal Area:	Climate change		
Sector(s):	General energy sector (100%)		
Theme(s):	Climate change (100%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	16.88	Total Bank Financing:	0.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			0.00
Global Environment Facility (GEF)			16.88
Total			16.88
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Global Environmental Objective(s)

The Project's Development Objective is to improve the institutional capacity of advanced clean energy (ACE) technology institutions (both public and private) in Mexico, foster the

commercialization of ACE technologies by providing financial incentives to the private sector, and in the process reduce GHG emissions.

3. Project Description

Component 1: Regional Needs Assessments (RNAs) and Clean Energy Regional Investment Plans (CERIPs). (Funding: GEF US\$4.58 million; SENER US\$90 million)

The objectives of Component 1 are: (i) conduct RNAs to assess the capacity of academic and research institutions, private enterprises, and sub-national government entities across Mexico to develop and commercialize ACE technologies; (ii) prepare the CERIPs that aim to boost institutional capabilities to produce clean energy technologies in order to broaden the currently concentrated energy R&D market in Mexico; and (iii) identify promising initiatives that can be considered for financial support by the ACE Grant Fund competition (Component 2) or the FSE Fund.

The RNAs will be prepared for all States in Mexico by sub-region. For each region, specialized consultants will: (i) survey and map the resources and capacities (human, technical, infrastructure, financial) of Mexican universities, research institutions, and clean energy enterprises; (ii) identify the ACE technology needs of private sector enterprises in strategic sectors; (iii) identify each region's comparative advantage in S&T sectors and in the clean energy value chain; (iv) review the capacities of sub-national government entities to implement policy and regulation conducive to the dissemination of clean energy technologies; (v) assess existing regional and national financing sources, and (vi) identify financial, regulatory, and policy barriers.

The key output of the regional needs assessments will be a set of CERIPs that will: (i) identify the investments and strategic actions (curriculum changes, the creation of new incentives, policy reforms) recommended and agreed to have strong potential over the medium-term to boost human capital in S&T and entrepreneurial (finance, business administration, strategy) disciplines critical to commercialize ACE technologies.

The follow-up investments identified by the CERIPs will be financed by SENER through their US \$90 million parallel financing contribution. SENER will seek to leverage its CERIP investments by seeking co-financing from other government stakeholders (local and state governments, other federal agencies). The CERIP is intended to bring these entities together towards implementing a coherent strategy that can advance clean energy technology development and commercialization. The plan is that the RNAs will begin in 2014 and be completed within a year, after which the implementation of the CERIPs would take place from 2015-2018.

Component 2.1: ACE Fund Matching Grant Competition (Funding: GEF US\$10.50 million; private sector enterprises: US\$1.85 million). Through a grant competition and open call for proposals, the ACE Grant Fund Competition will provide grants to private sector enterprises for: (i) Proof-of-concept stage development of ACE technologies; and (ii) Collaborative Clean Energy Commercialization (CCEC) targeting industry-academia collaboration for ACE technologies. In both cases, the grants will target those ACE technologies with strong commercialization potential, and grants will not be provided to academic and research institutions, which have other sources of support including the FSE Fund. All applicants will be required to contribute 15 percent of the total project cost as matching co-financing. The terms, eligibility criteria, maximum grant size, application procedures, procurement rules and processes, monitoring criteria, and other features of both the proof-of-concept and the CCEC grant are included in the Project Operational Manual (POM). Where possible, the ACE Fund will look for ways to leverage its investment by identifying potential co-

financing by private financiers and/or commercial banks, other sectoral funds, or the FSE.

Component 2.1 seeks to fill a void in the current public and private financing landscape for early-stage technology commercialization in Mexico, and to incentivize industry-academia technology development collaboration through a pilot grant program. The ACE Fund will focus on specific technology areas for development where there is both regional demand and a comparative advantage for Mexico. For example, among the technical areas that are a priority for Mexico are energy efficiency, geothermal, wind, biomass, and solar energy technologies. Over time, the technology focus will be further narrowed and refined by the results of the analysis carried out in Component 1, and promising ideas will be recommended for participation in the ACE Fund competition.

The selection of grantees under the ACE Fund will be done by an Investment Committee chaired by SENER and composed of individuals with strong expertise in early-stage technology commercialization, venture capital, applied research, ACE technologies, and concept-to-market strategy. The Investment Committee is expected to meet on a bi-annual basis to vote on grant awards. Applicants not accepted for a matching grant will receive detailed feedback and may be recommended for TA if the Investment Committee believes this could accelerate ACE technology commercialization. Following the implementation of the ACE Fund awards, the Investment Committee members will be allowed to finance promising ACE technologies in subsequent commercialization stages. Such investments will be open to any financier, and rules to guard against a real or perceived conflict of interest are detailed in the POM.

Component 2.2: Technical Assistance (Funding GEF: US\$1 million; Private sector enterprises: US\$111,000). Winning proposals from Component 2.1 will receive “on-boarding” technical assistance (TA) as part of their overall grant package and as a condition of their award. TA will cover topics such as business plans, IP protection and monetization, marketing strategies, access to finance, and safeguards. In addition, the Investment Committee will have the authority to allocate small (less than US\$10,000) TA awards to proposals which were short-listed but which do not receive a matching grant from the ACE Fund (Component 2.1). Such TA will be awarded where it is believed that such assistance alone could advance the commercialization of ACE technologies. TA recipients will be required to co-finance 10 percent of the costs of the TA award.

Component 3: Project Management. (Funding: GEF US\$0.80 million: SENER US\$2 million).

The Project will utilize and strengthen the existing Project Implementation Unit (PIU) within SENER to coordinate and manage the Project. The additional workload of the project is expected to require the addition of four new team members:: a procurement specialist, a financial management specialist, and two project managers, one for Component 1 and another for Component 2. Additional support for screening grant applications under Component 2 will be provided by SENER personnel or sub-contractors. SENER has agreed to provide an equivalent of US\$2 million in cash or in-kind support to project management.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project will feature a competitive grant program eligible to qualified Mexican applicants. At this point it is not known where such technology developers and entrepreneurs will be located. The project will provide grants to start-up clean energy technology companies, and the size of grants (varied, but on average less than US\$500,000 and no more than \$2 million) will limit the physical impacts of the prototype technologies. No sub-projects will be financed that could adversely affect

indigenous peoples, natural habitats, physical cultural resources and forests or that could cause involuntary resettlement as per OP 4.12.

5. Environmental and Social Safeguards Specialists

Alonso Zarzar Casis (LCSSO)

Jose Luis Calderon Bartheneuf (LCSEN)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	<p>The early stage of commercial development and the small scale of the technologies supported are not expected to result in significant negative environmental impacts, but minor impacts will be avoided or minimized with the use of an ESMF.</p> <p>It is important to note that since there will be an exclusion list of subprojects and no category A subprojects will be supported, the potential subprojects will fall into either B or C categories. All sub projects will be subject to screening by SENER. This screening process will be supported by an ESMF that will be developed by a consultant hired by SENER to be applied by proponents when they submit to SENER their subprojects for evaluation and possible funding. This consultant will also train SENERs designated personnel in the use and follow up of this ESMF.</p> <p>This ESMF will determine, if any, the legal, environmental and social requirements that may apply to the subprojects, and compliance actions, if any, that will be mandatory for project funding. Additionally the ESMF will have a specific section to estimate the scope and magnitude of expected environmental and social concerns if the subproject is to scale up in the future (cradle to grave). The team environmental and social specialists will supervise the proper application of this ESMF.</p>
Natural Habitats OP/BP 4.04	No	The project will not finance any activities that impact natural habitats.
Forests OP/BP 4.36	No	The project will not finance any activities that impact forests.
Pest Management OP 4.09	No	No sub-projects that require the purchase or significant use of pesticides will be supported.
Physical Cultural Resources OP/BP 4.11	No	No sub-projects that may impact physical cultural resources will be supported.

Indigenous Peoples OP/BP 4.10	No	The ESMF will screen out sub-projects that infringe upon the rights of indigenous peoples, including territorial and intellectual property rights. It is highly unlikely that indigenous peoples will seek benefits from the Project in ways that would merit specific outreach approaches or design adjustments to accommodate the needs of these communities.
Involuntary Resettlement OP/BP 4.12	No	The Project will not finance any activities that will require the involuntary taking of land that result in physical displacement, loss of assets or access to assets or economic displacement.
Safety of Dams OP/BP 4.37	No	The project will not finance the construction or rehabilitation of any dams nor will finance activities that rely on the operations of existing dams.
Projects on International Waterways OP/BP 7.50	No	The Project will not finance any activities that impact international waterways as defined under the policy.
Projects in Disputed Areas OP/BP 7.60	No	The Project will not finance any projects in disputed areas as defined under the policy.

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:
The subprojects are expected to fall into mostly C and some in B categories, and will be subject to a screening and follow up process based on a specifically developed Environmental and Social Management Framework (ESMF) which will guarantee the compliance of bank safeguards and national legislation. No potential large scale, significant or irreversible impacts are expected.
2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
Due to the type of projects expected and due to the fact that exclusion list applies, most of the subprojects will be category C and a low percentage will be category B and these will be subject to follow up by SENER and Bank according to the application of the ESMF developed for this purpose with Bank approval. No indirect or long term impacts are expected.
3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
N.A.
4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
The monitoring of the prerequisites on environmental impacts resolutions are guaranteed by the Federal Environmental Protection Agency (PROFEPA) which depends directly upon the SEMARNAT and enforces the environmental legislation for which it has specialized offices in every state. PROFEPA is a 20 year old organization with a noble and effective entrustment, but

with very limited resources for operation.

The existing SENER PIU has some capacity to manage social and environmental safeguards issues, as it is currently implementing a large number of infrastructure-intensive Projects in the energy sector, such as solar farms for remote communities, as well as wind farms. Since the proposed Project will not finance infrastructure projects, the Bank will provide training to key personnel at SENER, the PIU, and on the investment committee in the proper application of the safeguards instrument for the proposed Project. Additional environmental and/or social consultants will be hired as needed for the Project who are found to be acceptable to the Bank. Personnel will be required to fulfill the following objectives:

- screen potential subprojects for environmental and social risks and impacts
- ensure that sub-borrowers carry out an environmental and social assessment for their respective subproject
- verify that subprojects comply with local laws and are consistent with Bank Safeguards Policies

The safeguards instrument will be an Environmental and Social Management Framework (ESMF). The ESMF is being prepared by SENER, with support from World Bank environmental and social specialists. In practice, the ESMF will be a screening tool to help key personnel to identify which projects to exclude, and for approved projects with some perceived environmental and or social risks, how to manage them.

Social: The Project will not finance any sub-projects that impact the rights of indigenous peoples, including their territorial and intellectual property rights. Sub-projects to be financed will be technologies related to energy efficiency and renewable energy that will not use indigenous intellectual property. Rather, the intellectual property is expected to derive from R&D activities in inter alia, the life sciences, industrial and mechanical engineering, thermodynamics, and geology. In addition, sub-projects will not be financed in the territories of indigenous peoples. As such, the risk that sub-projects financed by the ACE Fund infringe upon the territorial and intellectual property rights of indigenous peoples are expected to be minimal.

Moreover, it is not very likely that members of indigenous communities, or cooperative organizations, will seek to benefit from the Project by preparing proposals for the ACE Fund. Sub-projects will be selected for support that produce innovation in the advanced clean energy technology sector. As such, it is highly unlikely that indigenous communities will benefit directly from sub-projects in ways that would merit specific outreach approaches or design adjustments to accommodate the needs of these communities.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Under Component 2, the key stakeholders will be private enterprises across Mexico. These institutions will be the key stakeholders in the consultation process since they will have to be aware of the ESMF application and follow up by SENER and the World Bank. Consultation and disclosure of the safeguard policies that apply in the Project will take place during the provision of technical assistance services at the beginning of grant implementation. The ESMF will be disclosed at SENER's web page and in World Bank's Infoshop after consultation and before appraisal.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	04-Apr-2014
Date of submission to InfoShop	30-Apr-2014
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
<i>Comments:</i>	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

III. APPROVALS

Task Team Leader:	Name: Todd M. Johnson	
<i>Approved By</i>		
Sector Manager:	Name: Malcolm Cosgrove-Davies (SM)	Date: 15-Apr-2014