



Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 18-May-2017 | Report No: PIDISDSC20674



BASIC INFORMATION

A. Basic Project Data

Country Mexico	Project ID P161311	Parent Project ID (if any)	Project Name DEVELOPMENT OF CARBON CAPTURE, UTILIZATION AND STORAGE IN MEXICO - PHASE II (P161311)
Region LATIN AMERICA AND CARIBBEAN	Estimated Appraisal Date Dec 18, 2017	Estimated Board Date Jan 31, 2018	Practice Area (Lead) Energy & Extractives
Financing Instrument Investment Project Financing	Borrower(s) Secretariat of Finance and Public Credit (SHCP)	Implementing Agency Secretariat of Energy (SENER)	

Proposed Development Objective(s)

The project development objective (PDO) is to implement pilot projects to assess the feasibility of, and build expert capacity for, carbon capture, utilization and storage in Mexico.

Financing (in USD Million)

Financing Source	Amount
Borrower	26.70
Carbon Fund	12.00
Total Project Cost	38.70
Environmental Assessment Category	Concept Review Decision
B-Partial Assessment	Track II-The review did authorize the preparation to continue

Have the Safeguards oversight and clearance functions been transferred to the Practice Manager? (Will not be disclosed)

No



B. Introduction and Context

Country Context

1. Mexico's economy continues to expand and so does the country's energy demand. According to the International Energy Agency (IEA), Mexico's primary energy demand has increased by 25% since 2000 with electricity demand increasing at twice this rate over the same period.¹ Total energy demand in Mexico is overwhelmingly met by fossil fuels – 90% in 2014 (oil: 51%, gas: 32%, coal: 7%).² Electricity demand represents 18% of total energy demand and is also dominated by fossil fuels, predominantly natural gas. In 2015, fossil fuels represented around 73% of the installed electricity capacity, meeting around 80% of the annual electricity demand.³ Hydropower is the largest non-fossil fuel electricity source in Mexico followed by nuclear. Other renewable energy resources include geothermal and wind power. Utilization of wind power, in particular, is growing rapidly with the current focus on power production from the Isthmus of Tehuantepec in Oaxaca, where around 80% of Mexico's wind capacity is installed.⁴

2. Mexico's greenhouse gas (GHG) emissions in 2012 were 663 million metric tons of carbon dioxide (CO₂) equivalent (MtCO₂e), making the country the 13th largest emitter globally. At the same time, per capita emissions in Mexico are lower than the world average and significantly lower than those by other members of the Organization of Economic Cooperation and Development (OECD).⁵ Mexico is, however, committed to GHG emissions reductions as demonstrated by its *Intended Nationally Determined Contribution* (INDC), submitted to the United Nations Framework Convention on Climate Change in March 2015. Mexico's INDC sets a GHG emission reduction target of 22% by 2030 with respect to a Business as Usual (BAU) trajectory, increasing to 36%, subject to international financial and technological support. These targets are in line with Mexico's 2013 National Climate Change Strategy.⁶

3. Although Mexico is committed to reduce its emissions, fossil fuels will remain the country's main primary energy source for at least the rest of the century. The rising trajectory of GHG emissions from fossil fuel combustion is likely to exceed the ambitious mitigation goals set forth by the government. To address this challenge, Mexico is looking for ways to increase the deployment of clean energy technologies, including renewable energy and carbon capture, utilization and storage (CCUS, see text box below). In 2015 the *Law of Energy Transition* was approved, which set national clean energy production targets: clean energy matrix, the Government of Mexico (GoM) has highlighted CCUS as a critical transition measure to a low-carbon energy sector and overall economy, and has singled out CCUS as one of its principal clean energy technologies to reach its national GHG emission reduction goals.

4. In 2014 the GoM released its 11-year CCUS Roadmap, which sets the following objectives: 1) to guide CCUS development from the stage of incubation to commercial deployment; 2) to establish a framework for CCUS resource knowledge dissemination, capacity building, including management capacity, and regulatory incentives for CCUS implementation; 3) to support achieving government goals on CO₂ emission mitigation and creation of carbon markets; and 4) to coordinate research across the entire CCUS chain. The Roadmap comprises five phases (incubation, public policy development, planning, pilot- and demonstration-scale projects, and commercial-scale projects), each of which is

¹ <u>www.iea.org/countries/non-membercountries/mexico/</u>

² www.iea.org/publications/freepublications/publication/MexicoEnergyOutlook.pdf

³ Ibid.

⁴ Ibid.

⁵ <u>http://data.worldbank.org/indicator/EN.ATM.GHGT.KT.CE?year_high_desc=true</u>

^b www.gob.mx/cms/uploads/attachment/file/41978/Estrategia-Nacional-Cambio-Climatico-2013.pdf

⁷ <u>http://dof.gob.mx/nota_detalle.php?codigo=5421295&fecha=24/12/2015</u>. Clean technologies are defined as having CO₂ emission rates of no greater than 100 kg/MWh.



broken down into a number of individual projects. This Roadmap is expected to develop CCUS technology far enough by 2024 that the technology can be seriously considered as a critical GHG mitigation option for the country.

Box 1: Carbon capture and storage (CCS) is a suite of GHG mitigation technologies that integrate the process of capturing CO_2 from emission sources, transporting it to a storage site and permanently sequestering CO_2 in underground geological formations. Carbon capture, utilization and storage (CCUS) is a modification of this technology, which allows utilization of the captured CO_2 for various purposes, with subsequent permanent subterranean storage. In the context of Mexico, CCUS focuses predominately on using the captured CO_2 for enhanced oil recovery (EOR) to increase oil production from depleted oil fields, while permanently storing CO_2 in the depleted oil layers. CCUS is applied in both power generation (coal-, gas- and biomass-fired) and industrial processes, reducing CO_2 emissions by as much as 85-90%, and eliminating local pollutants (sulfur oxides, nitrogen oxides and particulate matter), thus making a significant contribution to the global reduction of GHG emissions as well as other pollutants. Further information on CCUS can be found in the PCN.

5. The aim of this recipient-executed Technical Assistance Project (hereinafter "TAP") is to support the GoM in implementing the CCUS Roadmap, focusing on the first stages of CCUS development. The TAP is part of an overarching Programmatic Technical Assistance (PTA) project, entitled "*Capacity Building for Carbon Capture, Utilization and Storage in Mexico*", which is presented in a separate PCN (P161360) and includes World Bank (WB)-executed activities that support and complement this TAP. Details of the linkage and timing between this TAP and the overarching PTA are provided in the PCN. The World Bank CCS Trust Fund (WB CCS TF) will finance both the PTA (USD 4 million) and the TAP (USD 12 million). The GoM will provide counterpart resources in the amount of USD 26.7 million.

6. This TAP builds on previous work undertaken as part of Phase I of the WB's technical assistance program on CCUS in Mexico. Under Phase 1, a USD 1.3 million grant was provided by the WBCCSTF to undertake three foundational studies, which were completed in 2015:

- (1) A prefeasibility study⁸ of a post-combustion CO₂ capture pilot plant at the Poza Rica natural gas combined cycle (NGCC) power station, which is owned and operated by the Comisión Federal de Electricidad (CFE).⁹
- (2) A study into transitioning CO₂-enhanced oil recovery (CO₂-EOR) projects to permanent storage projects¹⁰, which involved the development of recommendations for the implementation of advanced monitoring techniques and protocols that will permit future recognition of Petróleos Mexicanos' (PEMEX)¹¹ planned CO₂-EOR operations as permanent CO₂ storage projects.
- (3) A study into the development of a regulatory framework for CCUS in Mexico.¹² This study involved a survey of international regulatory frameworks, a review of existing Mexican laws and regulations, the identification of gaps and barriers, and the development of recommendations to address the latter.

⁸ <u>https://www.gob.mx/cms/uploads/attachment/file/107318/CCPP_Final_Report.pdf</u>

⁹ State-owned electric utility

¹⁰ <u>https://www.gob.mx/cms/uploads/attachment/file/107317/CO2EOR-CCS_Final_Report.pdf</u>

¹¹ State-owned oil and gas company

¹² <u>https://www.gob.mx/cms/uploads/attachment/file/107321/REGULATORY_CCUS_Final_Report.pdf</u>



Sectoral and Institutional Context

7. CCS/CCUS technology is generally well understood and has been used for decades on a large scale in certain industrial applications, such as oil and gas processing, fossil fuel-fired electricity generation, petroleum refining and, in some cases, coal/gas-to-liquids production. Land-based CO_2 pipelines are an established technology, and large-scale injection and geological storage of CO_2 have been safely performed in depleted oil and gas reservoirs for over 40 years and in saline reservoirs for more than 20 years.

8. Worldwide, there were 16 large-scale, integrated CCS/CCUS projects in operation at the end of 2016, the majority being involved in gas processing. This portfolio of large-scale projects is expected to grow to 21, as six more projects in the power, iron and steel and chemical industries are being launched in 2017-2018. Three-quarters of the current or new projects will utilize the captured CO_2 for EOR, which is a commercially-established value proposition for the productive use of CO_2 priced by the private sector. The remaining projects focus on storing CO_2 in subsurface geological formations for climate change mitigation purposes.

9. With the recent advances in realization of integrated CCUS projects, the principal barrier to technology adoption remains the insufficient financial and/or regulatory policy incentives for the private sector's investment. In the developing country context, additional challenges, inhibiting broader deployment of CCS/CCUS, relate to limited technical and institutional capacity as well as insufficient experience, working with the technology.

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10. Nevertheless, CCS/CCUS is technically proven globally and projected to play a significant role in GHG emissions reduction strategies for many countries (including Mexico). Facilitation of technical assistance and knowledge transfer between leaders in the CCS/CCUS field and developing country partners (and respective implementing agencies) will undoubtedly advance CCS/CCUS deployment worldwide, since according to the IEA, in order to limit the increase in global temperatures to 2°C, 70% of the presumed installed CCUS capacity will need to be in developing countries.

11. Initial investigations into the feasibility of CCUS for Mexico began in 2006. The GoM has since taken the development of CCUS forward through a number of measures, including building knowledge capacity and carrying out assessments of CO_2 storage resources across the country. In 2012, the GoM, with support from the U.S. and Canada, completed the Atlas for the Geological Storage of CO_2 in Mexico.¹³ The Atlas identified a number of potential storage areas with an estimated CO_2 storage capacity of 100 billion metric tons of CO_2 in 11 different geological basins, distributed mostly in the eastern states of the country. This capacity would be enough to store all of Mexico's annual CO_2 emissions for more than 130 years. In recent years efforts have been undertaken to expand these storage capacity assessments and improve their accuracy.

12. The GoM is currently in the process of establishing a Mexican Center for CCUS (Centro Mexicano de Captura, Uso y Almacenamiento de Dióxido de Carbono, CEMCCUS), which will be overseen by La Secretaría de Energía (SENER)¹⁴. CEMCCUS will coordinate CCUS research as well as supports technical, social and regulatory measures needed for the development and implementation of CCUS technology in the country. CEMCCUS will be established as an Innovation Center funded through Los Fondos Sectoriales (FS)¹⁵, a funding instrument of SENER, and El Consejo Nacional de Ciencia y Tecnología (CONACYT).¹⁶ Five similar centers (geothermal, solar, wind, biomass and ocean energies) have already been created.

13. A CCUS Working Group that was formed by SENER in 2013, which since has been meeting on a regular basis, is currently being transformed to become the base for a new CEMCCUS. All major institutions and agencies in Mexico

¹³ <u>http://www.gob.mx/sener/articulos/atlas-de-almacenamiento-geologico-de-co2-mexico</u>

¹⁴ Department of Energy

¹⁵ Sector Funds

¹⁶ National Council for Science and Technology



involved in CCUS will become members of the CEMCCUS, including SENER, La Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT)¹⁷, CFE, PEMEX, El Instituto Nacional de Electricidad y Energías Limpias (INEEL)¹⁸, El Instituto Nacional de Investigaciones Nucleares (ININ)¹⁹, El Instituto Mexicano del Petróleo (IMP)²⁰, El Centro Mario Molina (CMM)²¹, and a number of other relevant organizations as well as universities.

14. CCUS is a new technical area for Mexico. Human and institutional capacities and technical expertise are limited to selected specialists in SENER, SEMARNAT, CFE, PEMEX, INEEL and ININ. At the government level, SENER leads and coordinates the development of CCUS, in close collaboration with SEMARNAT. CMM has been an initiator and a strong supporter of CCUS development. Universities have generally not had much engagement in CCUS, with the exception of La Universidad Nacional Autónoma de México (UNAM)²² and El Instituto Politécnico Nacional (IPN)²³, both of which are primarily involved in assessing the geological aspects of CCUS.

15. In 2014, a Canada-Mexico-U.S. Trilateral Memorandum of Understanding on Climate Change and Energy Collaboration was signed. One of the action items of the subject Memorandum was the establishment of a trilateral working group on CCUS, with the objective to build CCUS capacity, share research and technical project knowledge, and advance the deployment of CCUS.

Relationship to CPF

16. The TAP is well aligned with the objectives of the WB's *Mexico Country Partnership Strategy* (CPS) for 2014-19. It is embedded in one of the areas of engagement (themes) for the WB in Mexico (*Promoting Green Growth*), contributing to (i) reducing the footprint of growth, and (ii) using natural resources in an optimal way. It also strengthens, in a sustainable manner, the Mexico CPS effort at selectivity for the highest impact of WB activities on the twin goals of WB comparative advantage and client demand, and it is aligned with the WB's efforts to integrate financial, knowledge and convening services in a tailored package of development solutions.

17. The TAP is also aligned with the WB's Twin Goals of eliminating extreme poverty by 2030 and boosting shared prosperity by enhancing Mexico's capacity and knowledge of clean technologies, to be used worldwide for the purpose of incorporating clean technologies into other developing countries' energy matrices. The proposed TAP will support Mexico and other developing countries in meeting growing electricity demand in a sustainable manner, strongly correlating with economic and human development rates.

18. The TAP is in alignment with other national initiatives to support Mexico's effort towards a low-carbon economy:

- i. It supports one of the five pillars of Mexico's 2013-2018 National Development Plan (NDP), *Prosperous Mexico*,²⁴ through engagement in sustainable development and clean energy.
- ii. It contributes to one of the five goals in Mexico's *National Climate Change Strategy* (i.e. reduce energy intensity through efficiency and responsible consumption). This strategy (see paragraph 2) outlines numerous specific

¹⁷ Department of Environment and Natural Resources

¹⁸ National Institute for Electricity and Clean Energy

¹⁹ National Nuclear Research Institute

²⁰ Mexican Petroleum Institute

²¹ Mario Molina Energy and Environment Research Center

²² National Autonomous University of Mexico

²³ National Polytechnic Institute

²⁴ <u>http://pnd.gob.mx/wp-content/uploads/2013/05/PND.pdf</u>



actions to achieve long-term growth under the principles of sustainability, rational use of natural resources and promotion of clean technologies, and is one of the most important planning documents in Mexico's climate change mitigation agenda.

iii. It also contributes to Mexico's targets for employing clean energy technologies for electric energy generation. The GoM targets, recently published as part of the *Law of Energy Transition* (see paragraph 3), will be enforced through a new system of Clean Energy Certificates.

19. Finally, this TAP is also aligned with the WB's 2013 Energy Directions Paper (ESDP)²⁵, which provides an impetus for the WB to support projects that reduce GHG emissions with prohibitive costs and high risks while demonstrating a strong country ownership and offering strategic potential and positive global externalities.

C. Proposed Development Objective(s)

20. The project development objective (PDO) is to implement pilot projects to assess the feasibility of, and build expert capacity for, carbon capture, utilization and storage in Mexico.

Key Results (From PCN)

- 21. The proposed results indicators of this project are as follows:
 - (1) A post-combustion CO₂ capture pilot plant at the Poza Rica NGCC power station has been successfully designed, procured, constructed and operated. This result will demonstrate that CO₂ can be captured under conditions specific to Mexico, while adhering to all applicable national and international technical, health, safety, social and environmental safeguards and best practices;
 - (2) A single, one-week-long "huff-and-puff" CO₂ injection test has successfully been planned, designed and conducted by PEMEX, demonstrating that the target oilfield is suitable for CO₂-EOR and CO₂ can be safely and permanently stored, while adhering to all applicable national and international technical, health, safety, social, and environmental safeguards and best practices;
 - (3) A Mexican Centre for CCUS is established and operational;
 - (4) The number of CCUS practitioners in Mexico (policy makers, managers, scientists, engineers and technicians) has increased.

D. Concept Description

22. The proposed TAP will support the implementation of three independent components that comprise the major elements of the GoM CCUS program: the CO_2 Capture Pilot Plant (CCPP), the stand-alone CO_2 -EOR Storage Pilot (CESP), and the establishment of the CEMCCUS.

(1) **Component 1: CCPP Project.** This project involves the planning, design, construction, and operation of a capture pilot plant, to be retrofitted into the existing Poza Rica NGCC power station in the State of Veracruz. The capture plant will remove about 20 metric tons of CO₂ per day, using technology to be provided by an EPC contractor,

²⁵

http://documents.worldbank.org/curated/en/745601468160524040/pdf/795970SST0SecM00box377380B00PUBLIC0.pdf

who will be competitively selected. The project is scheduled to run from 2017 to 2021. Comprehensive reviews will be conducted at every stage of the project to inform decision making and ensure that the basis for continuing with the project's implementation is justified. In addition to the technical activities, this project will also include capacity building and stakeholder engagement activities. As the technically most challenging part of the TAP, the CCPP will receive the largest portion of the TAP funding.

- (2) Component 2: CESP Project. This project involves a one-week CO₂ injection "huff-and-puff" test at the PEMEX's Brillante oilfield in the Cinco Presidentes Asset (State of Veracruz). During and after the injection, the project will implement the recommendations made in the Phase I study report, concerning the application of advanced CO₂ modeling, characterization and monitoring techniques and protocols. The monitoring task will be carried out during the injection test and over a period of two months following the completion of the test. If the pilot injection proves the suitability of the PEMEX Brillante oilfield for CO₂-EOR and subsequent CO₂ permanent storage, PEMEX will carry out following larger demonstration tests with funding, provided through the GoM Hydrocarbon Fund. As with the CCPP, this component will include capacity building and stakeholder engagement activities.
- (3) Component 3: Establishment of CEMCCUS. This component entails a competitive bid process in 2017, through which a management firm will be hired by SENER to carry out non-technical operations of the Centre. The CEMCCUS's mandate will cover all activities described in the Mexico CCUS Roadmap. The CEMCCUS will oversee the implementation of the CCPP and CESP, chairing the respective project Steering Committees, provide planning for capacity building activities for various stakeholders, and carry out research projects, most of which to be supported by the GoM. As per the Interim Guidelines on the Application of Safeguard Policies to Technical Assistance (TA) Activities in Bank-Financed Projects and Trust Funds Administered by the Bank (January 2014), pertinent safeguards principles and procedures will be included in the Terms of Reference (ToRs) for the creation of the CEMCCUS and in the guiding principles / curricula / operational manual for the CEMCCUS. The GoM will support the CEMCCUS for three years, following the end of the first year of support through TAP. The CEMCCUS is to be financially independent four years after its creation.

SAFEGUARDS

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

The environmental and social risk of this project as a pilot are considered low, if not negligible because of their size compared with its host industrial facilities. The potential environmental and social impacts are related to the implementation of two pilot projects to be carried out under the TAP. Both are located in existing CFE/PEMEX facilities in Veracruz, Mex.

The CCPP to be hosted at the CFE generation facility will be proving the feasibility of capturing CO2 from a natural gas combined-cycle (Poza Rica NGCC) power plant. The amount of CO2 to be captured will be about 20 tons per day. The CESP project will be located in a PEMEX- oil field in the State of Veracruz (Cinco Presidentes asset) where the CO2 injection, sourced from the Cosoleacaque ammonia plant located 30 km away from the injection site (transported by tank trucks), will be tested (huff-and-puff) to assess EOR response, to optimize monitoring protocols and to verify the permanent storage of CO2 and its potential leaks. The risk of negative environmental impacts is considered essentially non-existent, because only a minimum amount of CO2 will be injected compared to the activities developed commercially in other countries (700 tons of CO2 will be capture over a period of one week). In other such large-scale CO2-EOR operations performed in oil fields for over 40 years, no major risk incidents or negative environmental impacts happened.



In addition, the release of CO2 in oil fields occurs naturally.

Transportation of the required CO2 will take place in tank cars to carry out the load on the Coatzacoalcos primary federal road and secondary roads, with a frequency of five trucks per day. It is anticipated that this transportation will not affect the roads, because the roads are now used on a daily basis for all types of oilfield activities and represent no major risk for the environment. The construction of any type of pipeline is not considered.

With the introduction of the Law on Hydrocarbons (2014), a new regulatory agency (ASEA) has been created within SEMARNAT to regulate the environmental impacts of the hydrocarbon sector. It will be necessary to request ASEA about the modality of the required Environmental Impact Assessment. An Environmental Management Plan will be developed for each pilot by CFE/PEMEX.

The CEMCCUS itself will be a virtual center and, therefore, have no environmental impacts. Social impacts will likely be positive due to the increased employment opportunities.

B. Borrower's Institutional Capacity for Safeguard Policies

SENER has taken the leadership in the development and deployment of CCUS in the country, in close collaboration with SEMARNAT. Both institutions have significant experience in the application of WB safeguard policies. SEMARNAT is responsible for developing public policies related to environment protection, and is also responsible (through PROFEPA) for enforcing compliance with the environmental law and regulation. Also, the new regulatory agency ASEA will participate in the supervision of both pilot projects. Furthermore, capacity building activities have already been carried out in Mexico since 2009 in the form of short courses, workshops and study tours.

CFE has substantial experience in developing power plants and preparing related Environmental Impact Assessments. CFE will benefit from capacity building activities on environmental aspects on the CO2 capture technology, which will be supported by the parallel Programmatic Technical Assistance (P161360).

PEMEX is an experienced institution with regard to environmental management. Managing the anticipated impacts from a pilot CO2 storage project are within the existing expertise of PEMEX staff.

C. Environmental and Social Safeguards Specialists on the Team

Sanjay Srivastava, Environmental Safeguards Specialist Robert H. Montgomery, Environmental Safeguards Specialist Arelia Jacive Lopez Castaneda, Social Safeguards Specialist

D. Policies that might apply

The risk Category for this project is "B", even though no major environmental risk or impacts are expected, the construction of the pilots implies civil works that could represent small temporal and punctual impacts. An Environmental and Social Impact AssessmentEnvironmental Assessment OP/BP 4.01Yes(ESIA), as well as an Environmental Management Plan (EMP) will be needed for each pilot project. CO2 transport in tank cars and injection activities in geological formations (pilot), could cause environmental and social impacts, such as leaks, or leakage through a waterproof confining layer (cap-	Safeguard Policies	Triggered?	Explanation (Optional)
	Environmental Assessment OP/BP 4.01	Yes	no major environmental risk or impacts are expected, the construction of the pilots implies civil works that could represent small temporal and punctual impacts. An Environmental and Social Impact Assessment (ESIA), as well as an Environmental Management Plan (EMP) will be needed for each pilot project. CO2 transport in tank cars and injection activities in geological formations (pilot), could cause environmental and social impacts, such as leaks, or



rock); or release through the injection well. This could lead to degradation of water quality in shallow aquifers and changes in soil and microbial chemistry. The ESIA and EMP will be consulted and disclose before appraisal.

Nonetheless, and given that the capacity of the proposed pilot projects will be small, environmental impacts would be limited to insignificant emissions to air, water and land. The assessed risk of any significant adverse or irreversible environmental or social impacts is considered negligible. Since Mexico has no formal CCUS legal and regulatory framework, as yet, some uncertainty exists regarding the permitting requirements under the current legislation. To mitigate this risk, support on developing the required legislative and regulatory framework will be provided through the parallel PTA (P161360), as a continuation of the background analysis and recommendations regarding the potential regulatory CCUS related framework that were completed under phase I of the project.

The ESIA will address, among others, the potential adverse impacts of CO2 injection, leakage from the confinement areas, and health and safety issues within the limits of the facility where the injection is to be performed.

While no potential objections to the proposed pilot projects from the stakeholders, including the local public, are foreseen, to mitigate any potential stakeholder risks, a local community communication and engagement plan will be developed and executed before, during and after the implementation of the projects.

With regards to the establishment of the Mexican Center of CCUS (which will be supported under the PTA and will, among other tasks, oversee the implementation of the pilot projects, i.e. the CCPP and the CESP), and as per the Interim Guidelines on the Application of Safeguard Policies to Technical Assistance (TA) Activities in Bank-Financed Projects and Trust Funds Administered by the Bank (January 2014), pertinent safeguards principles and procedures will be included in the Terms of Reference (ToRs) for the creation of this Center, as well as in the guiding



			principles / curricula / operational manual for the
			CEMCCUS. The GoM will support the CEMCCUS for three years, following the end of the first year of support through TAP. The CEMCCUS is to be financially independent four years after its creation.
	Natural Habitats OP/BP 4.04	No	This policy is not triggered given that Project will not support interventions near or in reserves, protected areas or natural habitats.
	Forests OP/BP 4.36	No	This policy is not triggered given that the Project will not support interventions in forests.
	Pest Management OP 4.09	No	This policy is not triggered given that the Project will not support acquisition or use of pesticides.
	Physical Cultural Resources OP/BP 4.11	No	This policy is not triggered given that the Project will not affected fiscal cultural resources.
۲IC	Indigenous Peoples OP/BP 4.10	No	There is no possibility of the presence of or impacts on indigenous communities.
For Official Use Only	Involuntary Resettlement OP/BP 4.12	No	The project is unlikely to involve any involuntary resettlement, as such potential locations would be avoided.
	Safety of Dams OP/BP 4.37	No	This policy is not triggered given that the Project will not support the construction or rehabilitation of dams, nor will support other investments which rely on the services of exiting dam.
	Projects on International Waterways OP/BP 7.50	No	This policy is not triggered because the proposed project will not affect international waterways.
	Projects in Disputed Areas OP/BP 7.60	No	This policy is not triggered because the proposed Project will not affect Disputed Areas defined under this policy.

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Jul 31, 2017

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

Environmental and Social Impact Assessments by SENER (2 months) Environmental Management Plans by SENER (1 more month)



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APPROVAL

Task Team Leader(s):	Nataliya Kulichenko, Guillermo Hernandez Gonzalez
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Approved By

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Practice Manager/Manager:	Antonio Alexandre Rodrigues Barbalho	09-May-2017
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