

Clean Development Mechanism (CDM)
Feasibility Assessment
for El Paso Electric Brick Kiln Asset in Mexico

Submitted to:

El Paso Electric

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Submitted by:



URS-Raleigh
1600 Perimeter Park Drive
Morrisville, NC 27560

INTRODUCTION

URS Corporation seeks to assist El Paso Electric (EPE) in determining the potential feasibility of a greenhouse gas (GHG) emission reduction project in Mexico under the Clean Development Mechanism (CDM) framework. The project activity first involves review of emission reductions associated with small, individually operated brick kiln facilities in Ciudad Juarez, Mexico. This program involved reconstruction, funded and conducted by EPE, of a number of such kilns to a new configuration that is more energy efficient, and offer reduced emissions of air pollutants (such as particulate and carbon monoxide) and greenhouse gases per unit of brick produced. The objective of the proposed program would be to assess the available emission reductions attributable to the brick kiln retrofits, and develop a mechanism to utilize these GHG reductions as part of a CDM project.

URS is prepared and uniquely qualified to assess the feasibility of monetizing GHG emission reductions, including their potential validation and registration as a Clean Development Mechanism project. This proposal illustrates how URS plans to support EPE.

- **Phase I – feasibility check:** Based on input from EPE, URS will develop preliminary estimates of the GHG emission reduction project baseline, post-project emissions, potential leakage outside the project boundaries, and potential credits to be generated by installing the project activity. In coordination with EPE, URS will also initiate discussions with the appropriate government agencies (environment, energy, CDM) to make a preliminary determination of CDM project acceptability.
- **Phase II – future development of a project design document (PDD):** Depending on the outcome of the feasibility assessment, Phase II activities to develop the PDD would be scoped and costed at that time. In Phase II, URS will prepare the baseline methodology and monitoring plan in accordance with the CDM Executive Board requirements, as well as the full PDD package.

PHASE I SCOPE OF WORK

URS would initiate the feasibility study with a focused kick-off meeting conducted via conference call. This call would allow EPE and URS to discuss anticipated activities, schedules, and deliverables, and reach specific agreement on all details for this feasibility study. The conference call would be followed by preparation and submittal of an information needs request. Examples of the types of information that we would like to obtain from EPE include construction/operating permits, environmental impact assessments (EIAs), project CAPEX and O&M data, and monitoring data summaries, if available.

Following the kick-off meeting and subsequent phone conversations, URS will prepare a preliminary baseline and post-project emissions estimate for the project, taking into account the most likely baseline methodology and baseline scenario selection. As such, URS will establish a preliminary GHG emissions baseline methodology and identify the candidate baseline scenarios for evaluation under the project. To the extent practical, URS will utilize the findings and emission-related information developed from the prior Brick Kiln Study performed with EPE on the pilot brick kiln unit. The candidate baseline scenarios will be used in the screening process to determine CDM project additionality, in accordance with CDM

guidelines from the Executive Board. The most appropriate baseline scenario, taking into account the barriers for implementation, will be selected for the preliminary determination of potential emission reductions from the project. Likewise, post-project emissions will be estimated, taking into account the project-specific activities, such as operation of current and additional future brick kilns with the demonstrated reconfiguration.

URS will assess the project risks, strengths and weaknesses against CDM eligibility and generally accepted project evaluation criteria, including the following:

- Project additionality relative to CDM Executive Board guidance;
- Projected level of emission reductions over the crediting period of the project;
- Sustainable development criteria;
- Probability of host country approval;
- Assessment of level of uncertainties and risks;
- Identification of any potential issues associated with documentation and transparency;
- Baseline and/or ownership issues that may impact creditability of reductions; and
- Verifiability of baseline and post-project emissions.

We will assess the project with respect to the CDM project criteria outlined in the Kyoto Protocol, the CDM Modalities and Procedures in the Marrakech Accords, and most updated guidance from the CDM Executive Board.

In the CDM project cycle, the project proponent (i.e., EPE aided in this case by URS) prepares a PDD, and must engage with the DNA to secure host country approval prior to project registration. This approval is contingent upon meeting the Mexico Government's Designated National Authority (DNA) framework for sustainability, which requires projects to meet social, economic and environmental criteria, such as contribution to local environmental sustainability, net job creation, income distribution, capacity building, and regional integration. URS will work with EPE to secure supporting information to understand the specific sustainability requirements in Mexico and the specific project influences with respect to these sustainability requirements.

URS will document the results of its desktop review for EPE. Beyond documenting the basis for the emissions reduction assessment and any uncertainties, we will also discuss the costs and benefits of developing a PDD for CDM registration. URS will prepare a presentation and summary of results and recommendations and present it to EPE in El Paso or via conference call. This presentation will provide an overview of the opportunity for EPE and any areas of risk that need to be considered prior to moving forward with the PDD. This presentation will also serve as part of the preparations for follow-up meetings with the Mexican government agencies, to be conducted early in a subsequent Phase II.

PHASE II DISCUSSION

Although not scoped in detail in this proposal, the initial work under Phase II would build from the initial feasibility-level assessment in Phase I to fully define and document the project activities and project boundaries. As part of the project definition, the sources of emissions, boundaries consistent with the project activities, and potential sources of leakage will be defined.

Based on the initial assessment in Phase I, the baseline approach [i.e., Article 48(a) of the CDM Modalities and Procedures], baseline methodology, and baseline scenario would be further clarified and documented. If an approved methodology cannot be applied to the brick kiln project, then complete documentation of the baseline methodology would need to be developed and integrated into the PDD for approval by the CDM Methodology Panel. As this assessment of appropriate baseline methodologies will be part of the Phase I feasibility study, a more defined scope can be prepared and submitted to EPE at the conclusion of the Phase I activities.

URS EXPERIENCE

URS combines our leadership position in CDM feasibility and PDD development for major energy clients, with direct involvement in existing and emerging guidance, and extensive experience in developing standards and methodologies. Our most recent experience includes:

- For Indocement, a Heidelberg Cement subsidiary in Indonesia, URS conducted a CDM feasibility assessment, and developed the PDD in conjunction with the World Bank PCF, which is the largest reduction project in the PCF portfolio. The baseline methodology is in the final approval process through the CDM Methodology Panel, which is undergoing revisions based on the Meth Panel comments. Through this CDM project activity, URS has experience in interactions with the CDM Executive Board in project registration. The project includes the use of alternative fuels to reduce combustion emissions, in addition to process emission reductions.
- URS is currently performing a CDM project feasibility assessment for three candidate reduction projects in Brazil for a multinational oil and gas client as the first stage of PDD development and project registration. Two of the three candidate projects are fuel switching from oil to natural gas for power generation. URS has performed two separate engagements with the DNA and Petrobras in Brazil to address sustainability issues.
- URS is working with the API / IPIECA steering group to develop guidance for project-based emissions reductions for projects applicable to the Oil and Gas Industry. As part of this initiative, we will be addressing fuel switching as one of the families of projects under consideration.
- For several major international energy clients, we have developed flare reduction projects in Angola and Nigeria, geothermal energy, cogeneration, and fuel switching projects. Further, we have developed a CDM project guidance document for an international oil and gas company to assist in feasibility assessment.

PROJECT SCHEDULE

For the Phase I feasibility assessment, the milestones and estimated completion dates are provided below.

Milestone	Date
Project Start	June 13, 2005
Project Kickoff Conference Call	June 15, 2005
Information Needs List	June 20, 2005
Preliminary Quantification and Feasibility Assessment	July 29, 2005
Documentation of Results	August 15, 2005
Conference Call to Present Results	August 19, 2005