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PERFORMANCE EVALUATION OF THE MEXICO LOW EMISSIONS DEVELOPMENT (MLED) PROGRAM

FINAL REPORT



April 7, 2014

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ACRONYMS

CE	Clean Energy
CESPEDES	Commission for Private Sector Studies for Sustainable Development
CEPs	Clean Energy Projects
CRE	Energy Regulatory Commission
EE/RE	Energy Efficiency and Renewable Energy
GCC	Global Climate Change
DCA	Development Credit Authority
DF	Distrito Federal
FIDE	Trust Fund for Electricity Savings
GHG	Green House Gas
GIZ	German Society for International Cooperation
GOM	Government of Mexico
II/UNAM	Engineering Institute of the Universidad Nacional Autonoma de México
INECC	National Institute for ecology and Climate change
KII	key informant interviews
LEDS	Low-Emissions Development Strategy
MLED	Mexico Low Emissions Development Project
MRV	Monitoring, Reporting and Verification
NAFIN	Nacional Financiera
NAMA	Nationally Appropriate Mitigation Action
PEMEX	Mexican State Petroleum Company
SEMARNAT	Ministry of Environment and Natural Resources
SENER	Ministry of Energy
SMEs	Small and Medium Enterprises

EXECUTIVE SUMMARY

This is the report of a mid-term evaluation of the Mexico Low Emissions Development (MLED) Program that was carried out in March 2014 by a three-person evaluation team. The original program was awarded to Tetra Tech in September 2011. MLED is a three-year program with a two-year option period and is funded by the Mexico Mission of the United States Agency for International Development (USAID). The MLED Program is intended to address Mexico's contribution to global climate change (GCC) and global greenhouse gas (GHG) emissions by assisting federal and state governments, businesses, and other stakeholders in establishing the key enabling conditions and tools needed to participate in emerging international GHG management frameworks and helping them to meet obligations under the Copenhagen Accord.

Upon the award of the contract, Tetra Tech faced some initial difficulties, as presidential elections were to occur in July 2012, and Mexican law posed restrictions on contacts with governmental officials during the run-up to the elections.

The sitting president at the time of the award, Felipe Calderón, had taken a personal interest in global climate change, and Mexico became a leader in the fight against global warming, making firm commitments for emissions reductions. Calderón's successor, Enrique Peña Nieto, took office in December 2012, as the program ended its first year. Doubts about the new administration's commitment to addressing climate change gradually dissipated as it renewed the commitment to Mexican leadership in emissions reduction.

The major achievements of the program so far include:

- The new baseline for emissions appears to be a significant improvement over the prior one, and numerous interviewees commented on its usefulness.
- The development of abatement cost curves was also seen as a useful contribution.
- The MRV concept seems an important addition to the toolkit of Mexican institutions, although some institutions will require substantial additional training if they are to internalize the concepts.
- Training appears to have been effective, though no effort was made to validate this. (A more complete assessment of the training provided would have included surveys of random participants in the training courses.)
- The work with NAFIN appears highly effective and more results in the future are promising. A DCA would further promote this effort.
- The collaboration with PEMEX appears to be quite effective with the possibility of major impacts on emissions from that giant enterprise.
- The involvement of the program seems likely to have a substantial impact on FIDE's outreach to SMEs regarding energy cost reduction.
- The program's work with the two state entities that we interviewed (Morelos and D.F.) appears to be highly effective and appreciated. If these two sub-national governments are able to carry out their planned activities, they could provide useful models for other Mexican states and sub-national governments elsewhere.

At the time that this evaluation was conducted, progress has been substantial and exceeds what would have been expected. The Tetra Tech-led team is highly regarded, and their contribution is highly valued by the Mexican institutions with which they work. We recommend that the project be extended for two more years.

BACKGROUND

The contract for MLED was awarded to Tetra Tech on September 1, 2011. It faced some initial difficulties, as presidential elections were to occur in July 2012, and Mexican law posed restrictions on contacts with governmental officials during the run-up to the elections.

The sitting president at the time of the award, Felipe Calderón, had taken a personal interest in global climate change, and Mexico became a leader in the fight against global warming, making firm commitments for emissions reductions. Calderón's successor, Enrique Peña Nieto, took office in December, as the program ended its first year. Doubts about the new administration's commitment to addressing climate change gradually dissipated as it renewed the commitment to Mexican leadership in emissions reduction.

Once new leadership was in place in the main partner institutions (SEMARNAT, INECC, and SENER), the program moved quickly to establish close relations with them and to offer expertise on a number of aspects of climate change and emissions reduction.

The four main tasks under the MLED Program were outlined at the outset as follows:

Task 1: Support the development and implementation of a national Low Emissions Development Strategy (LEDS) and sub-national climate change action plans

The MLED Program will work with a broad range of stakeholders to strengthen in-country human and institutional capacity for low-emissions development planning at the federal and sub-national levels. Technical assistance includes adapting analytical tools and practices such as emissions inventory development, economic and environmental modeling and analysis, sector-specific analysis, and data collection and management. The MLED Program team is expected to provide analytical support to identify, evaluate, and prioritize actions and programs that could contribute to low emission development such as market potential analyses, marginal abatement cost curves, and co-benefit assessments. In addition, the MLED Program should support the Government of Mexico (GOM) in developing policies and programs which facilitate implementation of sector-specific mitigation actions and which work to increase access to financing in support of LEDS implementation.

Task 2: Strengthen Mexico's systems to inventory, register, and conduct Monitoring, Reporting, and Verification (MRV) of GHG emissions

The MLED Program will provide assistance to the GOM (federal and state level) and the private sector to facilitate further development and expansion of its existing GHG inventory and monitoring systems with the eventual goal of fusing the two systems into a single, fully-integrated system that uses practical, reliable, internationally accepted methods and protocols for measuring, reporting, and verifying GHG emissions and mitigation from all sectors of the economy at the national, state, and municipal levels. This fully-integrated system should promote more effective and accurate measurement and reporting of emissions, ensure that Mexico is fulfilling its stated mitigation goals, and instill confidence in Mexico's commitments to the international community.

Task 3: Implement Clean Energy Interventions supporting LEDS

The Clean Energy component of the MLED Program will support the overall goal of reducing, mitigating, and/or sequestering GHG emissions by enhancing the GOM's efforts to increase the use of renewable energy and energy efficient end-use technologies, among other approaches.

The MLED Program should support the adoption, by appropriate stakeholders, of high-impact, low-cost, politically feasible actions with the potential for substantial GHG reductions while contributing to economic growth. To that end, the MLED Program team should work to: 1) design and carry out high-

potential, clean energy pilot projects; and 2) identify previously-tested, best practices—which have not yet been widely adopted—and bring them to scale through the development of programs and policies.

Task 4: Coordinate USAID/Mexico Global Climate Change Program

The MLED Program will be the lead mechanism under USAID/Mexico’s Global Climate Change (GCC) Program, implemented by a range of partners through diverse mechanisms. The MLED Program team is charged with documenting and integrating the results of these various programs, fostering collaboration, information sharing, and close coordination with other USAID/Mexico GCC Program implementers.

EVALUATION APPROACH

The team reviewed program documents—work plans, annual reports, and other relevant materials—prior to beginning the interview process on Monday, March 4, 2014. The team began by interviewing program management and their lead contractors. For the 12 days that followed, the team conducted interviews with 25 program partners, both in Mexico City and Cuernavaca. Given the wide range of the program and the large number of institutions involved, numerous additional interviews could have been conducted had more time been available.

Nearly all interviews were proposed and set up by Tetra Tech or USAID. While this is a potential source of bias, the evaluation team considered the selections to be the most appropriate key informants. One team member, having previously worked for SENER on such issues, possessed considerable knowledge of the relevant institutions and their roles.

Nonetheless, there were numerous other partners who were not interviewed, and no random survey of participants in the various training programs was undertaken. As a result, the quality of the training provided flowed entirely from the key informant interviews.

Despite these limitations, the evaluation team believes that this report is broadly representative of the actual results of the MLED Program.

PRINCIPAL FINDINGS

This section identifies major findings with respect to each of the four tasks assigned to the project. A considerable amount of additional information and reference material divided by task is included in Annexes A-D.

TASK 1: LOW EMISSIONS DEVELOPMENT STRATEGY

- Creation of a new emissions baseline was a significant improvement over the prior one and was regarded highly by interviewees. Key stakeholders disagreed with the previous baseline, and it lacked different scenarios to provide policy makers with the flexibility to adapt to different paths.
- The development of abatement cost curves was also seen as an important contribution. Together with the emissions baseline, it provides the basic framework for identifying the most efficient ways to reduce emissions. The issue of how best to achieve emissions reductions in Mexico is a very live topic among regulators, so the identification of least-cost approaches to reductions is of great interest. INECC appears capable of successfully implementing the program-developed tools based on the learning-by-doing training it received by having MLED consultants in-house at the time this tool was developed.

Two additional MLED influences on policy beyond those mentioned above stand out particularly:

- The program has successfully accompanied the implementation of the General Law for Climate Change which has far-reaching implications for the environment, for the Mexican economy, and for specific sectors like energy. The Law includes provisions to combat the adverse effects of climate

change. It also regulates actions to mitigate and adapt, as well as for coordination among national, state and municipal governments. The Law's provisions also assure continuity from one presidential administration to the next.

- PEMEX values MLED highly because it has paved the way for better communication between the oil company and the governmental authorities to which it now has to report. Since PEMEX is the largest producer of emissions, this makes the program quite important.

TASK 2: STRENGTHENING OF GHG MEASUREMENT, REPORTING, AND VERIFICATION

- The program “Eco-Crédito Empresarial” with NAFIN appears to be the major achievement of the MLED Program in this area. This program allowed the impact of more efficient energy use and refrigeration at small enterprises (e.g., convenience stores) to be easily estimated. NAFIN financing to replace energy-wasting appliances with efficient ones seems clearly to provide both energy savings and increased small business profitability.
- The Measurement, Reporting, and Verification (MRV) concept is an important addition to the toolkit of Mexican institutions. The most advanced partners, like INECC, appear to have internalized the concept and are prepared to use the tool without further assistance from the program. In other cases, particularly at the sub-national level, considerable further program involvement appears necessary for the approach to be successfully implemented.
- There are numerous other activities under this task; however, at this time, none of them appear to have yielded major impacts.

TASK 3: IMPLEMENTING CLEAN ENERGY PROJECTS

There are areas of overlap between Task 2 and Task 3 of MLED, as the line between developing and implementing MRV activities and implementing clean-energy projects seems somewhat arbitrary.

- The work with NAFIN appears highly effective, with more results expected in the future. A DCA would further promote this effort. There have been discussions of a DCA of up to \$100 million, but the status of NAFIN as a governmental institution appears to have been an obstacle so far to an agreement.
- The collaboration with PEMEX appears to be quite effective, with the potential for major impacts on emissions, given the size and energy usage of the company. PEMEX officials gave high praise to individual experts provided by the project and claimed that expertise provided by MLED was far superior to the advice of consultants the institution had sought apart from the program.
- The involvement of the project seems likely to have a substantial impact on FIDE's outreach to SMEs regarding energy cost reduction. MLED analyzed FIDE's procedures in one regional office and offered useful advice for streamlining the process of providing loans to reduce electricity usage. FIDE expects that the Tetra Tech suggestions will allow FIDE to substantially increase its outreach to SMEs.
- The program's work with the two state entities that we interviewed (Morelos and D.F.) appears to be highly effective and appreciated. If these two sub-national governments are able to carry out their planned activities, they could provide useful models for both other Mexican states and sub-national governments elsewhere.
- According to interviewees, training appears to have been effective; however, no effort was made to validate this. (A more complete assessment of the training provided would have included surveys of random participants in the training courses.)

TASK 4: MLED MANAGEMENT AND GCC COORDINATION

This task involves two different matters: coordinating MLED activities and coordination with other USAID activities dealing with global climate change.

Coordinating MLED

MLED is an extremely ambitious program. The year three work plan includes 167 activities. This is an extremely large number of activities to be managed by the program's small staff. While the Tetra Tech team leader appeared to be knowledgeable regarding every activity for which the team requested information, this is still a huge management challenge. Moreover, the project has lacked a Team Leader for Task 3 since December 2013, with the Tetra Tech team leader assuming partial responsibility for this task.

Of the 167 activities in the work plan, the state of implementation as of March 20, 2014 was as follows:

- Completed Activities 47
- Ahead of Schedule 15
- Behind Schedule 73
- Missed Completion Date 30
- Somehow miscounted 2
- Total: 167

Clearly, implementation lags behind the optimistic hopes held at the beginning of the year. Some 63 activities were either completed or ahead of schedule; however, another 73 were underway but behind schedule, and 30 were off track. Analysis of those 30 activities suggested that a few partners were responsible for most of them. State government partners were responsible for five, Amigos de Sian Ka'an and Watergy were responsible for four each, and the Colegio de Ingenieros Ambientales de México and Terra Peninsular were responsible for three each. As time and travel limitations did not permit the evaluation team to interview any of these partners, we regard these problems as less one of poor management and more a result of possibly overly-ambitious outreach. Not all potential partners will be willing or able to meet project requirements, much less USAID's demanding financial and contracting requirements.

Coordination with other USAID Activities on GCC

The annual and quarterly reports offer little insight regarding coordination with other USAID projects. The most recent annual and quarterly reports provide the same forward-looking sentence, stating that "The MLED program team will document and integrate the results of all these programs, fostering collaboration, information sharing, and close coordination with other USAID/Mexico GCC program implementers." In sum, there is little evidence of actual collaboration. At the same time, there is little that can be expected in this regard as MLED has no capacity to influence other projects, as each has a separate budget and a separate mandate.

Answers to the evaluation questions:

- I. *Did the program achieve the stated objectives and targets? Has the program led to concrete outcomes which will assist Mexico in planning and implementing efforts to reduce its GHG emissions?*

The program is largely achieving its objectives and targets. Our one concern is with the target for reductions in CO2 emissions. The project appears to have no means to measure such reductions, which are assumed in the PMP to grow exponentially towards the end of the project. We have no doubt that the project has reduced emissions, particularly through improvements in electrical appliances, but the project appears to have no mechanism to calculate their extent.

On the second question, we have no doubt that the project will produce concrete outcomes that will assist Mexico in this area, including GHG reductions. Mexico has adopted important measures in this area, including imposition of a carbon tax. Such a tax may be one powerful means of reducing carbon emissions.

2. *Has the program reached a point of sustainability (institutional and/or financial) so that its results may continue after the end of USAID support?*

We believe that there is still much to be done to achieve sustainability. In two years, we believe that NAFIN, FIDE and PEMEX will have implemented sustainable programs that no longer require USAID assistance. We doubt that sustainability will be achieved in some other activities, especially regarding sub-national governments.

For SEMARNAT and INECC, management of the former provided assurances that climate change, now included as a separate line item in the national budget, will receive steadily increased funding from the budget, apparently due in part to the carbon tax.

3. *What adjustments need to be done to align the program with GOM's priorities and ensure that Mexico moves forward towards LEDS and a wider use of clean energy alternatives?*

Clearly, the project's priorities are closely aligned with GOM priorities, and the project will undoubtedly help Mexico move towards LEDS and a wider use of clean energy alternatives.

Despite this close association between the project and GOM priorities, the evaluation team believes that there is potential for greater effectiveness of the project. We offer four recommendations for improvements in the project during the remaining time.

- A. Both SEMARNAT and INECC commented of insufficient information flow with the project. Efforts should be made to increase the level of contact with both institutions. The team suspects that the need for extensive coordination efforts among the diverse strands of the project may have short-changed external coordination. We recommend that the project undertake more frequent meetings with these two institutions.
- B. Conversations with the British Embassy and GIZ suggest that opportunities for better coordination with other donors exist. For example, the British Embassy seemed surprised when we described the project's plans for a major SME effort with FIDE and NAFIN, as it was about to launch a similar SME effort with the goal of reaching 150,000 SMEs over the next five years. Therefore, we also recommend more frequent exchanges of information with other donors.
- C. We believe that USAID should work with MLED to pare down its activity list, eliminating low-priority activities, and providing greater concentration on the most important avenues to emissions reduction.
- D. We note that the project interacts mainly with GOM agencies and with environmental NGOs. We believe that additional outreach to the private sector would add value to the project.

PRINCIPAL CONCLUSION

Tetra Tech has assembled a high-quality and motivated team. Their partner institutions are fully engaged, and the program has clearly used a collaborative approach. The evaluation team believes that the project has been highly successful so far, and will offer substantial added benefits if continued for an additional two years.

ANNEXES

ANNEX A: TASK I. LOW EMISSIONS DEVELOPMENT STRATEGY

The two objectives of Task I are to support the development and implementation of a national LEDS and state climate change action plans (PEACCs).

To achieve these objectives, Task I has been divided into subtasks and grouped into three components: technical and economic analysis; public policy and legal framework analysis; and state government PEACC support.

The first section provides a brief description of the major activities mentioned by the key stakeholders during interviews with the evaluation team. In the last part of this section, we list further activities reported by MLED.

SUMMARY ACTIVITY DESCRIPTION

1. Update of the emissions baseline.

Key partner: INECC

Brief description: This is a key activity for the entire MLED program. It is the starting point for Mexico's entire LED strategy. Based on information provided in interviews, the former emissions baseline lacked social validation as key stakeholders disagreed with it; moreover, the economic assumptions had changed. The new baseline provides different scenarios that give policy makers more flexibility to adapt to different paths.

Documentation available on website

Update of Mexico's Emissions Baselines and Mitigation Portfolio.

Sources: Interview with Vanessa Pérez-Cirera Senior Technical Advisor, Dr. Francisco Barnés, former Director General of INECC, now at the Comisión Ambiental de la Megalópolis.

2. Marginal abatement cost for emissions mitigation and project portfolio

Key partner: INECC

Brief description: Together with the update of emissions baselines this project constitutes a key to Mexico's LED Strategy. Formerly known as the McKinsey abatement cost curve, it identifies the most effective and efficient projects that would have a double dividend, producing both increased profitability and emissions reductions. According to stakeholders, INECC has now built internal capacity that will permit periodic updates of this tool.

Documentation available on website

Análisis actualizado de la línea base de emisiones de GEI de México, curva de costo marginal de reducción y cartera de proyectos

Sources: Interview with Vanessa Pérez-Cicera Leading Technical advisor, Dr. Francisco Barnés, former Director General of INECC, now at the Comisión Ambiental de la Megalópolis.

3. Harmonization of Legislation General Law of Climate Change (LGCC)

Key Partner: SEMARNAT

Brief Description: MLED provided support for the implementation of the General Law for Climate Change. This aid included support for the National Emissions Registry, support for the development of

State-level Climate Change Action Plans, and also the printing of key governmental climate change documents.

Documentation available on website

Green Budget Indexes (report available in their website: *Indice de Presupuestos Verdes*)

Reglamentación de la Ley General de Cambio Climático

Políticas Estatales en Materia de Cambio Climático

¿Cuáles son los siguientes pasos? Perspectivas jurídicas sobre la Ley General de Cambio Climático en México

Source: Interview with personnel from the Direction General for Climate Change Policies, SEMARNAT

4. PEMEX Climate Change Action Plan

Key Partners: PEMEX, SEMARNAT

Brief Description: Development of follow up tools, update of emissions baseline, and update of mitigation cost curves.

Documentation available on website

N/A

Source: Interview with the Manager for Environmental Sustainable Development, PEMEX

5. Assessment of Externalities in Power Generation (phase I and 2)

Key Partners: SENER, SCHP, CFE, SSA

Brief Description: Assessment of environmental costs of electricity generation through the use of different fuels during their life cycles. These costs are now used by CFE to plan their future capacity needs and power dispatch. A second phase includes dispersion models and dose-response functions that incorporate indigenous characteristics of Mexico.

Documentation available on website

N/A

Source: Interview with the Director General of Sustainability (SENER)

6. Update of the Morelos Climate Change Action Plan against Climate Change.

Key Partner: Undersecretary for Sustainable Planning, Government of Morelos

Brief Description: The main purpose of this project is updating, complementing, and increasing the scope and depth of the state-level climate change program that was previously developed by the Universidad Autónoma del Estado de Morelos. The former Morelos Climate Change Action Plan was very detailed in its biology component but lacked a clear link with the potential of the energy sector as contributor to the problem and key part of the solution. This project is being implemented by the Engineering Institute of the Universidad Nacional Autónoma de México (II/UNAM).

Documentation available on website

Related documents: *Políticas Estatales en Materia de Cambio Climático*

Sources: Interview with Fabio Manzini, Undersecretary of Planning for Sustainable Development, Government of Morelos.

7. Local Government Green Purchases

Key Partners: SEDEMA, GDF

Brief Description: Local government purchases normally are decided solely on the basis of cost. MLED has helped the DF to incorporate environmental attributes of the products purchased by the government as another variable in purchasing decisions. This action should help promote markets for environmentally-friendly products. In the longer run, the number of green product providers should increase, with these products becoming more cost-competitive.

Documentation available on website

N/A in website

Source: Interviews with personnel from the Direction of Climate Change and Energy GDF and from CYSte.

8. New (and existing) Buildings construction regulation

Key Partners: SEDEMA, Government of DF

Brief Description: MLED has provided technical assistance to the government of DF to develop the norms and regulations for new buildings that include the mandatory use of solar technologies for water heating and other efficiency measures such as water saving measures in new buildings. As a follow-up, they are considering expanding it to existing buildings.

Documentation available on website

Principales Factores para la Viabilidad Comercial y el Financiamiento de Proyectos de Energía Solar en México (presentaciones)

Source: Interviews with personnel from the Direction of Climate Change and Energy GDF and from CYSte.

9. Replacement of Refrigerators and Air Conditioners

Key Partners: SENER, FIDE

Brief Description: Technical advice on the program “Cambia tu viejo por uno Nuevo” (Change your Old One for A New One) which included the replacement and destruction of inefficient domestic appliances.

Documentation available on website

N/A

Source: Interview with the Direction General for Energy Efficiency and Technological Innovation (SENER)

Other activities reported by the program are:

- Economic modeling workshop (Related report available in their website *Inventario de Modelos y Modeladores en México relacionados al cambio climático y/o actividades económicas*)
- Climate Change Fund

- PIMU Morelos (although as reported by the recipient of this aid, this project is still at a very early stage)
- Promoting the establishment of Energy Commissions at state level
- Workshop on Transport
- Environmental Management Systems (Report available on website *Environmental Mitigation and Monitoring Plan*)
- Waste management (Report available on website *Experiencias internacionales en el composteo de residuos sólidos orgánicos*)

KEY FINDINGS

In terms of MLED influence, two issues stand out:

- The program has successfully accompanied the implementation of the General Law for Climate Change which has far reaching implications for the environment, for Mexican Economy and for specific sectors such as Energy.
- PEMEX values MLED because it has paved the way for a better communication between the oil company and the governmental authorities to which it has to report. Since PEMEX is the largest producer of emissions, this makes the program quite important.

In terms of contents and technical expertise:

- Recipients of MLED's aid regard the quality of the projects as world class; some of these projects are cutting-edge, either for their content, or for the methodologies they use (example: Externality projects phase 2).

In terms of the administration of MLED:

- Stakeholders commented that they would have liked to see faster project implementation. Nevertheless, they acknowledged that MLED has a limited staff. Some complained about the slow process for hiring consultants due to the bureaucratic requirements of USAID.

LIKELY IMPACT

In terms of MLED short-term impact:

- MLED's aid was key for the successful update of the emissions baseline curve and the mitigation project portfolio. According to many interviewees this is one of the main successes of MLED since it made it possible for them to implement the national climate change plan.
- MLED support helped institutions such as INECC by providing resources and technical expertise to key processes. According to stakeholders, MLED's help has shortened the process of extending their mandate.
- MLED provided help to sort out urgent needs to implement the General Law of Climate Change, with its strict time framework for follow-up actions.

In terms of MLED's long-term impact:

- This program promoted capacity-building within Mexican institutions. For example, MLED consultants were on-site at INECC to develop the Mexican Marginal Abatement cost curves. This allowed INECC personnel to pass on this knowledge to others in the institution. No further need for external consultants is expected.

- The Externality Assessment Project has built capacity in the Mexican task force created for this project (which includes personnel from SENER, SHCP, SSA, and CFE). Phase two of this project will take existing studies performed elsewhere and key parameters would be adapted with primary information from Mexico.
- The aid provided to local governments in DF and the State of Morelos should eventually spill over to other states with similar internal capabilities as these two. Some of the policies supported by these two jurisdictions are technically cutting-edge and, with some adjustments, could feasibly be replicated in other Mexican states.

ANNEX B: TASK 2. STRENGTHENING OF INVENTORIES, REGISTRIES AND GHG MEASUREMENT, REPORTING AND VERIFICATION (MRV)

This task refers to the adaptation and application of methodologies and protocols accepted worldwide to register, monitor, report and verify GHG emissions from all sectors of the economy, at federal, state and municipal levels in Mexico. The objective is to enhance the credibility and trustworthiness of the data reported implementing mitigation projects.

The first section provides a brief description of the projects mentioned by the key stakeholders during interviews by the evaluation team for the three-year period of MLED program. In the last part of this section, we list further activities reported by MLED.

I. Ecocrédito Empresarial Project

Key Partners: NAFIN, FIDE, SENER

Brief Description: *Ecocrédito Empresarial* is, in our opinion, the most important project related to Task 2 because of its potential for far-reaching impacts. With funding from NAFIN and FIDE as the implementing body, this project has sought to replace old refrigerators in small and medium enterprises (mostly convenience stores or groceries but also hospitals and restaurants). This program is the next stage of the previous program (*Cambia tu Viejo por uno Nuevo*) that replaced inefficient domestic appliances. Recipients of this aid receive a loan for a new refrigerator. The loan is repaid from savings in future electric bills. MRV tools developed by MLED have helped make more accurate estimates of return on investment and other financial measures. MLED also provided support to develop a web page for this program.

Documentation available on website

El estado de los sistemas de medición, reporte y verificación (MRV) a nivel internacional. Lecciones para la implementación de los programas de "Acciones nacionales apropiadas para la mitigación (NAMAs)" y "Estrategias de desarrollo bajo en emisiones (LEDS)" Rev. I.

The Status of Measurement, Report and Verification (MRV) Systems, at International Level. Lessons for the implementation of "Nationally Appropriate Mitigation Actions (NAMAS)" and "Low Emissions Development Strategies (leds)" Rev. I.

Verificación de gases de efecto invernadero. La V de Medición, Reporte y Verificación (MRV). Septiembre de 2012

2. Verification of Inventories for the State of Guanajuato

Key Partner: State of Guanajuato

Brief Description: MLED provided technical assistance to the State of Guanajuato to verify the status of their GHG inventories.

Documentation available on website

Related documents:

El estado de los sistemas de medición, reporte y verificación (MRV) a nivel internacional. Lecciones para la implementación de los programas de "Acciones nacionales apropiadas para la mitigación (NAMAs)" y "Estrategias de desarrollo bajo en emisiones (LEDS)" Rev. I.

The Status of Measurement, Report and Verification (MRV) Systems, at International Level. Lessons for the implementation of “Nationally Appropriate Mitigation Actions (NAMAS)” and “Low Emissions Development Strategies (LEDS)” Rev. I.

Verificación de gases de efecto invernadero. La V de Medición, Reporte y Verificación (MRV). Septiembre de 2012

Source: Interview with the implementer DNV

3. MRV project for the municipality of Veracruz

Key Partner: Municipality of Veracruz

Brief Description: MLED provided technical assistance to municipality to help them with the process of MRV of GHG emissions.

Documentation available on website

Related documents:

El estado de los sistemas de medición, reporte y verificación (MRV) a nivel internacional. Lecciones para la implementación de los programas de “Acciones nacionales apropiadas para la mitigación (NAMAs)” y “Estrategias de desarrollo bajo en emisiones (LEDS)” Rev. I.

The Status of Measurement, Report and Verification (MRV) Systems, at International Level. Lessons for the implementation of “Nationally Appropriate Mitigation Actions (NAMAS)” and “Low Emissions Development Strategies (LEDS)” Rev. I.

Verificación de gases de efecto invernadero. La Valor de Medición, Reporte y Verificación (MRV). Septiembre de 2012

Source: Interview with the implementer DNV

4. MRV project for the State of Morelos

Key Partner: Government of Morelos

Brief Description: Seminar of MRV techniques for the State of Morelos.

Documentation available on website

Related documents:

El estado de los sistemas de medición, reporte y verificación (MRV) a nivel internacional. Lecciones para la implementación de los programas de “Acciones nacionales apropiadas para la mitigación (NAMAs)” y “Estrategias de desarrollo bajo en emisiones (LEDS)” Rev. I.

The Status of Measurement, Report and Verification (MRV) Systems, at International Level. Lessons for the implementation of “Nationally Appropriate Mitigation Actions (NAMAS)” and “Low Emissions Development Strategies (LEDS)” Rev. I.

Verificación de gases de efecto invernadero. La V de Medición, Reporte y Verificación (MRV). Septiembre de 2012

Source: Interview with Fabio Manzini, Undersecretary of Planning for Sustainable Development, Government of Morelos.

5. System for Voluntary Registration of Emissions

Key Partner: CESPEDES

Brief Description: This project was intended as a computer platform where firms would voluntarily calculate their current GHG emissions. The project is still in development.

Documentation available on website

Not available

Source: Interview with Director General of CESPEDES.

6. Green Growth Alliance Plan Workshop

Key Partner: CESPEDES

Brief Description: MLED provided support for the organization of this workshop.

Documentation available on website

Not available

Source: Interview with Director General of CESPEDES.

7. Electricity and thermal Efficiency programs with the Private Sector.

Key Partner: Consejo Coordinador Empresarial

Brief Description: Energy diagnostics and business plans to reduce costs (and increase savings) by easy-to-implement actions.

Documentation available on website

N/A

SOURCE: Interview with CySTE

Other activities reported by MLED included:

- Workshop MRV FIDE and CFE
- Calculator for Energy Efficiency Project savings. According to interviews with MLED personnel, this project is an easy-to-use calculator that would help firms make rough estimates of savings after the implementation of an energy efficiency project
- Matrix for Technologies and Savings
- Guide for Energy Diagnostics
- Warranty Program DCA. According to interviews with NAFIN personnel, this activity is still at an early stage, and subject for approval from DCA. MLED has been promoting the collaboration.

KEY FINDINGS

Two things stand out in MLED's task 2 effectiveness:

- The support given to the program of "Eco-crédito Empresarial" was very important. Recipients of this aid consider that the technical support given by MLED has made estimation of financial impacts easier. This has helped translate environmental benefits to profits, paving the way for better communication between small and medium enterprises and financial institutions.

- Other activities reported by stakeholders or by MLED itself seem to be of less impact or are still in progress.

In terms of contents and technical expertise:

- Reports that are published on MLED's website seem to be of high technical contents, nevertheless, technology is evolving, so more sophisticated techniques will be needed in the future. Continued access to such expertise continues to be important.

In terms of the administration of MLED:

- Although the majority of the recipients of aid from Task 2 regard their contribution highly, there is room for improved communication between MLED and the private sector.

LIKELY IMPACT

In the short term:

- The implementation of Eco-Crédito Empresarial could have a very immediate effect in terms of mitigation of emissions and in profits from savings for the recipients of this credit.
- It could also give a boost to energy efficient product markets and help to phase out remaining inefficient domestic electric appliances.
- Still, new more accurate methodologies will require time for development and implementation.

In the long term:

- Based on the interviews performed by this team, we are not convinced that the technical knowledge of MRV has adequately permeated in Mexican institutions, either federal or, especially, at the state and local levels.
- With the implementation of Task 2, more businesses and banks should be willing to invest in energy-saving appliances and measures. Business case studies that went beyond diagnostics to full implementation would be a help. However, for the time being, energy saving would still need to compete within firms' budgets with other activities more centered in the core business of firms.
- It is very important to develop strong links with the private sector the same way the program has built successful collaboration with different levels of government.

ANNEX C: TASK 3. IMPLEMENT CLEAN ENERGY PROJECTS SUPPORTING LEDS

Task 3 is intended to implement clean energy projects supporting LEDS. Following the evaluation approach, the AMEX team relied on program-related documents and key informant interviews (KII) with relevant stakeholders and project partners. From Monday, March 3 to Friday, March 14, a total of 23 interviews were carried out, including interviews with the project manager, partner contractors, and stakeholders both in Mexico City and Cuernavaca, Morelos.

SUMMARY ACTIVITY DESCRIPTION

Task 3 encompasses six subtasks:

- Implement awareness programs for financial institutions and industries in order to support initial implementation efforts
- Provide project transaction support to encourage project completions
- Assist in developing NAMAs to help organize and coalesce Clean Energy (CE), especially Energy Efficiency and Renewable Energy (EE/RE)
- Conduct CE capacity building to strengthen federal, regional, and local policy and project proponents
- Develop CE outreach programs to foster buy-in for CE policies and projects from the full range of stakeholders
- Grants programs: Grants for contracts awarded competitively by the program to foster activities for emissions reduction.

KEY FINDINGS:

Subtask 1: Implement awareness programs for financial institutions and industries in order to support initial implementation efforts. Identifying the critical role of financing in the promotion and implementation of CE projects, MLED has targeted financial institutions and other sources of financing, providing key technical and financial support. In particular:

- The potential for a Development Credit Authority (DCA) Alliance with NAFIN would have a major impact for promotion of CE project financing programs for SMEs.
- The MLED Program is identifying appropriate businesses for CE projects. For this, the work with CESPEDS, INECC, and NAFIN is considered of great potential for building investor confidence.
- Enhancing the Eco-credit FIDE-PAEEEM has led to development of an application that calculates the cost-benefit results of investment on CE.

Subtask 2: Provide project transaction support to assure project completions. Based on subtask 1 results, MLED is to continue to select and develop CE projects. MLED's support may include studies for the promotion of regulatory instruments; feasibility studies to support start-up of RE projects; energy assessments in various productive sectors including at state, regional, and municipal levels; economic studies to promote new CE markets; better contract conditions of energy service companies; and comprehensive assessments of renewable energy and potential for energy efficiency development. For this:

- The support of MLED for developing guidelines for the auction process for small energy power production is expected to continue. CRE qualified this project as "very important" in light of the recent energy-sector reforms in Mexico.
- The Mexican renewable energy grid integration road map should result in implementing a program for understanding the potential for RE projects.

- The support given to the Government of Morelos with photovoltaic energy parks, and EE/RE in the industrial sector has the potential to create great economic development in that region.
- Audits for steam generation and distribution systems should continue to produce useful results in the industrial sector.
- MLED is supporting GDF through implementation of pilot projects for solar thermal energy in the health sector of Mexico City.
- Interviews with SEMARNAT, Government of Morelos, GDF, FIDE, INECC, CRE, Mario Molina Center, the UK Embassy, and PEMEX left no doubt technical advice given by the MLED program has been efficient and important.

Subtask 3: Assist in developing NAMAs to help organize and coalesce Clean Energy (CE), especially Energy Efficiency and Renewable Energy (EE/RE).

- The work supporting the NAMA for the cement sector is defining the baseline and mitigation goals together with the identification of projects.
- The NAMA on photovoltaic (PV) systems in the export industry is in development.

Subtask 4: Conduct CE capacity building to strengthen federal, regional and local policy and project proponents.

- Interviews with GDF, FIDE, INECC and CRE identified capacity-building as one of the most important components for MLED. Those four institutions consider the capacity building as a world-class tool that MLED provided. Stakeholders in INECC, GDF, and CRE consider the training an essential part of MLED's support and feel that it is necessary for them to continue for the next two years

Subtask 5: Develop CE outreach programs to foster buy-in for CE policies and projects from the full range of stakeholders. The outreach program is based on the Model for Policy Innovation and Low Cost Effective Building Consensus. MLED can make use of this model to support Tasks 1 and 2.

Subtask 6: Grants Programs

- Seven awards were granted under the 2013 Grants Program. Six are Mexican NGO's. For this year's program MLED developed an online system to manage the reception of grantee proposals. The evaluation committee is now in the process of reviewing 31 proposals.

LIKELY IMPACT

Addressing the three main questions of the evaluation with respect to Task 3, our analysis is as follows:

In terms of effectiveness of the activities:

The success of Task 3 is crucial for the achievement of MLED objectives and targets. In particular, supporting national efforts in both public and private sectors for the development of energy policies, financing mechanisms, and institutional and technical capacities to enable the adoption of clean energy are central to project success. Task 3 activities are also the cornerstone for developing Tasks, 1, 2, and 4 of the program. Through the implementation of pilot projects and collaboration with the private and public sectors under Task 3, MLED has reached important targets and achievements.

Interviews confirmed that the program has created effective and focused support that has created synergy at the national and even international level. In the case of the DF, the capacity building also enables a cultural change at the institutional level, drawing attention to the benefits of reducing emissions.

Long Term:

At present, it is difficult to predict sustainability after MLED ends; however, an appropriate design for the work plan for the next two years should include analysis of institutional sustainability, inter-institutional synergy, and coordination after MLED is completed. The current support given to DF, the State of Morelos, PEMEX, FIDE, SEMARNAT, and INECC make us believe this might be possible with careful work plan design.

Short Term:

This evaluation could be an opportunity to reconsider the program's strategy and focus on the opportunities that could be available with the GOM's priorities for LEDS and future collaborations at all levels. The focus on boosting the economy and productivity of the country by the new government is embracing a new vision that could constitute a unique opportunity for MLED and green energy markets, both at the national and international level.

In particular, projects identified and implemented by the program like the photovoltaic energy systems, the baseline for emissions, and cost curves have great potential to be used as models for other projects, both at national and international level. They could be models for improving other programs with similar vision and objectives like REDD+, and MREDD. Efforts should concentrate on continuing these projects if the work strategy is redesigned.

Although no effort was made to validate the effectiveness of the capacity building by MLED, the interviews with various stakeholders agreed that capacity building has been an important element of the project. Thus it should also be a focus of MLED moving forward.

Key Findings:

Looking ahead, the program should reconsider its communication channels and widen its technical personnel. Three general suggestions among the interviewees were: 1) more communication; 2) broader access by relevant agencies to the MLED information systems; and 3) faster delivery for the technical reports.

However, the project has been highly successful so far and offers substantial benefits for LEDS in Mexico. Thus, it should continue for two more years. The management by Tetra Tech Inc., has been highly strategic and efficient at overcoming barriers and gathering a qualified team to target projects and achieving MLED's objectives.

ANNEX D: TASK 4. MLED MANAGEMENT AND GLOBAL CLIMATE CHANGE COORDINATION

This task is meant to coordinate the efforts of all task leaders in order to assure achievement of MLED project goals. It considers effective leadership, management, and communication within and outside the project. This includes an information organization and dissemination activity, the MLED website, monitoring and evaluation systems, project management activities, and MLED's grants administration. Finally, Task 4 requires MLED to coordinate, not only within itself, but also among all of USAID/Mexico Climate Change programs.

Main Findings: Project management appears to have been able to provide appropriate oversight for the myriad of activities undertaken through this program (167 activities in the three year work plan). The tracking system provides a clear and up-to-date appreciation of the status of each of the activities.

The main website of the project provides considerable amounts of useful information, including downloadable copies of the various studies produced by the project. Its annual and quarterly reports provide additional insights into project activities.

The evaluation team did not analyze the project's grant administration. As noted in the main report, a number of activities planned for grantees have not met planned timeframes for completion. Time constraints did not allow the evaluation team to explore this issue further.

MLED coordination of all USG activities in the climate change area appears to be beyond the project's reach. MLED is one among equals as project implementers for USAID/Mexico's Climate Change programs. As such, it lacks any authority over other USG activities in the country. The project leadership appears to have done what it could in this area, nevertheless, the evaluation team did not interview other USAID projects to ascertain their views on this issue.

ANNEX E: SCOPE OF WORK

SECTION 2

SCOPE OF WORK

Performance Evaluation of the Mexico Low Emissions Development Program

Introduction

The current Mexico Low Emissions Development (MLED) Program, implemented by Tetra Tech, Inc., encompasses a three year base period of performance plus a two year option period. The program's base period ends in August 2014. The Mission seeks to conduct an assessment of the program's performance over its base period, September 2011 – August 2014, to determine whether to exercise the option period.

This assessment should examine:

- Outcomes relative to the objectives, goals, work plans and activities conducted by the program over the base period;
- The implementer's contribution to the wider adoption of clean energy technologies and the transition to a low-emissions development path in Mexico;
- The context of the Government of Mexico's (GOM) priorities with regard to low-emissions development and clean energy;
- What opportunities exist for the MLED program to make significant contributions in regard to GOM priorities during the option period?

Background

The MLED program was launched in 2011 to support the GOM's efforts to develop and implement a Low-Emissions Development Strategy (LEDS); strengthen robust systems for Monitoring, Reporting and Verification (MRV) of emissions across all emitting sectors of the economy; and promote the widespread adoption of clean energy technologies and best practices through the development of energy policies, financing mechanisms, and institutional and technical capacity in Mexico.

The program was expected to engage a broad set of stakeholders, including the relevant agencies of the GOM, civil society organizations, academic institutions, and the private sector. With the Mexican federal government as the primary partner, the program was also asked to leverage the current work of Mexican federal, state, and local governments, in order to ensure sustainability and optimize the use of USAID funding.

Given the imminent completion of its three-year base period and taking into consideration a change of the GOM administration since the program began, it is necessary to take stock of how the MLED program has performed in accomplishing its objectives and goals, to evaluate how well the program succeeded in partnering the relevant actors and how well the results achieved by the program matched the GOM's and the country's needs. Secondly, in order to decide whether to exercise the two year option period, it is important to examine whether the program's objectives, goals and components, as originally conceived, are aligned with the new administration's priorities and vision and are appropriate given the current state of the clean energy and low-emissions development arena in Mexico. Finally, should the Mission exercise the option period, the Mission needs to identify the necessary programmatic adjustments as well as specific opportunities for the MLED program to make in the coming years in order to maintain or improve its contribution to the widespread adoption of clean energy and the transition to a low-emissions development path in Mexico.

Assessment Questions

Within the context of the program's results framework, work plan outputs and outcomes, the assessment will answer the following three questions:

1. Did the program achieve the stated objectives and targets? Has the program led to concrete outcomes which will assist Mexico to planning and implementing efforts to reduce its GHG emissions?
2. Has the program reached a point of sustainability (institutional and/or financial) so that its results may continue after the end of USAID's support?
3. What adjustments need to be done to align the program with GOM's priorities and ensure Mexico moves forward towards a LEDS and a wider use of clean energy alternatives?

Critical Assumptions

- Addressing the impacts of global climate change in Mexico is still a top priority for the new GOM administration.
- Widespread adoption of clean energy and the transition to a low-emissions development path in Mexico still play a significant role within the country's vision and plans to address climate change impacts.
- Technical assistance delivered through the MLED program can make a significant contribution to the country's efforts to expand the adoption of clean energy and transitioning to a low-emissions development path.
- Working at the policy level is the most cost-effective way for USAID programs to have a strong result.

Approach

- Review MLED program and background documents, including indicator data, quarterly reports, weekly highlights, and list of publications supported by the program.
- Conduct interviews with key MLED staff, including the Chief of Party and component leaders, main subcontractors and key sub grantees.
- Conduct interviews with key MLED partners (SEMARNAT, INECC, SENER, CFE, CRE, CONUEE, NAFIN, Microfinance network, GDF, state level government entities).
- Hold interviews and discussions with other donors, including the World Bank, IDB, the British Embassy, the GIZ, the French Development Agency and the EU delegation to understand whether the program complements activities of other international donors.
- Interview Embassy counterparts such as ECON and POL.
- Review both recent government and independent GCC-related reports and assessments and evaluations about LEDS matters in Mexico.
- Review private sector annual reports and published documents that review trends and policy that effect development in Mexico (i.e., renewable energy and energy efficiency technology and development companies, etc.)

Existing Data

A broad range of useful background documents is available including indicator data, quarterly reports, weekly highlights, and list of publications supported by the program. In addition, there are several analysis, strategy, and evaluation documents that span the entire GCC portfolio which should be reviewed. It should be noted that a few of these documents are considered Sensitive but Unclassified (SBU) and should be treated as such. These include:

- Project SOW,
- Annual work plans,
- Monitoring and Evaluation Plans,
- Quarterly and Annual Reports,

- Regional Inspector General Audit Review of GCC Programs - will provide useful information and an analysis of the performance and effectiveness of the first implementation year. (SBU)

Early in FY2014, USAID/Mexico should receive approval of a new Country Development Cooperation Strategy which will be useful for development of forward-looking recommendations.

USAID will provide the evaluation team with a package of briefing materials including each of the above listed items.

Expertise Required

The MLED analysis team shall include a team leader who has strong knowledge of USAID programs, an advanced degree in Environmental Science or a related field, and experience conducting analyses of climate change mitigation. The ideal team would include at least one Mexican investigator with a degree in Environmental Policy or a related field. Strong knowledge of Mexico required. All team members must speak Spanish fluently. References required. The current manager of USAID/Mexico's MLED program is expected to work closely with the team.

Draft Work Plan/Schedule

A work plan (detailing the methods to be used) and schedule shall be submitted within the first seven days after the start date of the consultancy and submitted to USAID for review and approval. USAID will review/approve the work plan and schedule within five working days. A brief summary of the work plan should be drafted in Spanish in order to facilitate consultations with Mexican counterparts.

Draft Assessment and Report

A first draft of the assessment report shall be completed within 30 working days and submitted to USAID both, electronically and in hard copy. Submission of the draft report will be accompanied by an oral debriefing to the Mission staff. Findings of the assessment shall be specific, concise and supported by sound, robust methodology, and quantitative and qualitative information that is reliable, valid and generalizable. Recommendations shall be action-oriented, practical and specific. USAID will submit comments on the draft report within five working days.

Final Assessment and Report

A final analysis and report shall be completed within ten (10) working days after the Mission submits comments. The final report shall include:

- Full responses to all evaluation questions included in the scope of work, including, where applicable, differentiated impacts and outcomes for men and women;
- Full description of the methodology (or methodologies) used, as well as the limitations associated with the evaluation methodology, such as selection bias, recall bias, unobservable differences between comparator groups, etc.;
- Recommendations documented by a specific set of findings, action-oriented, practical and specific with defined responsibility for the action.

Annexes to the final report shall include:

- the original scope of work for the assessment, along with any agreed upon modifications;
- all tools used in conducting the assessment, such as questionnaires, checklists and discussion guides;
- a comprehensive annotated bibliography; and
- a list of interviewees with dates.

A brief synopsis, in Spanish, summarizing the findings shall be produced in order to share with our Mexican counterparts.

Amex International Inc.

IQC No. AID-RAN-I-00-09-00008

Task Order No. AID-523-TO-14-00001

Period of Performance

Consultant will begin work with materials provided by USAID, and travel to Mexico City for two weeks during the month of March 2014 and with a final report due to Mission Management by April 30, 2014.

END OF SECTION 2

ANNEX F: INTERVIEW INFORMATION AND MATERIALS

SCHEDULE OF INTERVIEWS FOR THE MLED EVALUATION: MARCH 3 – 14, 2014

Objective: Meetings with USAID/México, MLED Program, sub-contractors, and counterparts in the federal, state, and local governments; the private sector; and international donors.

Ist Week, March 3-7, 2014

March 3, 2014

9:00 -10:00: Meeting with USAID, American Embassy

11:00 – 13:00: Meeting with Lic. Ana Arrocha, General Director of the MLED program.

Lunch

Meetings with MLED Subcontractors at the MLED office.

16:00 – 16:30: Ing. Alejandro Lorea MGM, Leader of Task 2 of MLED.

16:30 – 17:00: Ing. Ramiro Barrios, DNV.

17:00 – 17:30: Ing. Rubén Torres, CySTE.

March 4, 2014

10:00 – 11:00: Meeting with Dr. Vanessa Pérez-Cirera, Technical Advisor to MLED, and Director for Climate Change at World Wildlife Fund.

12:00 – 13:00: Meeting with Santiago Creuheras, SENER, Ministry of Energy.

16:00 – 16:30: Meeting with Beatriz Bugeda, SEMARNAT Offices

March 5, 2014

11:00 – 12:30: Meeting with Dr. Fabio Manzini, Office of the Secretariat for Sustainable Development of the Government of Morelos State, in Cuernavaca.

17:00 – 18:00: Meeting with Ing. Óscar Vázquez, Office of the Secretary of Environment, Government of the Federal District.

March 6, 2014

9:30 – 10:30: Meeting with Lic. José Antonio Urteaga, of FIDE.

12:00 – 13:00: Meeting with Jimena Marván, at the PEMEX Office

16:30 – 17:30: Meeting with Lic. Carolina Fuentes, representing Enrique Lendo, at the SEMARNAT offices.

March 7, 2014

10:00 – 12:00: Meeting with Dr. Amparo Martínez, General Director of INECC.

13:00 - 14:00: Meeting with Dr. Adrián Fernández y Daniel Chacón, at the offices of LARCI, (Latin America Climate Initiative- ClimateWorks Foundation).

2nd Week, March 10 –14, 2014**March 10, 2014**

12:00 – 13:00: Meeting with Ing. Ernesto Feilbogen, Coordinator of Sustainable Energy for GIZ, Offices of the Secretariat of Energy.

17:00 – 18:00: Meeting with Lic. Miguel Villegas y C.P. Patricia Ramírez, Offices of NAFIN.

March 11, 2014

10:00 – 12:00: Meeting with Lic. Ana Arrocha, MLED offices.

16:30 – 17:30: Meeting with Ing. José Ramón Ardavín, General Director of CESPEDES

March 12, 2014

9:30 – 10:30: Meeting with Lic. Efraín Villanueva, Director General de Sustainability, Ministry of Energy.

12:00 – 13:00: Meeting with Dr. Francisco Barnés, CAME (environmental Commission of the Megalopolis).

March 13, 2014

9:30 – 10:30: Meeting with Dr. Juan Carlos Belausteguigoitia, Director of the Centro Mario Molina.

11:30 – 12:30: Meeting with Mr. Richard Shackleton, British Embassy in Mexico.

16:30 – 17:30: Meeting with Dr. Alejandro Peraza, General Director for Electricity and Renewable Energy, and the Energy Regulatory Commission.

March 14, 2014

11:00 – 13:00: Closing Meeting with USAID Officials and MLED Leaders, US Embassy.

LIST OF PERSONS INTERVIEWED

Adriana Aragón Tapia, Deputy Director for Energy Transition, Secretariat of Energy, GOM
Norma Álvarez Girard, Director of Implementation, Comisión Reguladora de Energía, GOM
José Ramón Ardavín Ituarte, Executive Director, CESPEDS
Ana Silvia Arrocha Contreras, Chief of Party, MLED for Tetra Tech
Ramiro Barrios, Coordinator Advisory Services, SUS Emerging Markets Latin American Energy
Juan Carlos Belausteguigoitia, Executive Director, Centro Mario Molina
Gina Cady, Environment Officer, USAID Mexico
Mónica Echegoyen López, Director of Global Environmental Policy, SEMARNAT, GOM
Ernesto Feilbogen, Sustainable Energy Program Coordinator, GIZ
Adrián Fernández-Bremauntz, CEO, Latin American Regional Climate Initiative
José Carlos Fernández Ugalde, General Coordinator, Green Growth, SEMARNAT
Carolina Fuentes Castellanos, Deputy General Director for International Cooperation, SEMARNAT, GOM
Miguel Villegas Lerdo de Tejada, Director of Financial Intermediaries and Microcredit, Nacional Financiera, GOM
Alejandro Lorea, Senior Project Director, MGM/Innova
Fabio Manzini, Subsecretary of Planning for Sustainable Development, Morelos State
Jorge Martínez Ruiz, General Director for Energy and Climate Change, State of Morelos
Jimena Marván Santin, Manager, Sustainable Development and Environment, PEMEX, GOM
Adrián Paz, Clean Energy Advisor, Tetra Tech
Vanessa Pérez-Cirera, Program Director for Climate Change, World Wildlife Fund Mexico
Alejandro Peraza Garcia, General Director for electricity and Renewable Energy, National Energy Regulatory Authority, GOM
Antonio Pérez Rodríguez, Deputy General Director for Bioenergy, Secretariat of Energy, GOM
Patricia Ramírez Gómez, Deputy Director for Sectoral Projects, Nacional Financiera, GOM
Adriana Reyes Ortega, Sectoral Project Directorate, Nacional Financiera, GOM
Richard Shackleton, First Secretary for Climate Change, British Embassy in Mexico
Jose Antonio Urteaga Dufour, Deputy Operations Director, FIDE
José María Valenzuela, Director of Sustainable Energy, Secretariat of Energy, GOM
Oscar Vázquez, Director of Climate Change, Distrito Federal
Roberto Vélez Grajales, Director Social Mobility Program, Centro de Estudios Espinosa Yglesias
Efraín Villanueva Arcos, General Director, Sustainability, Secretariat of Energy, GOM

MLED MID-TERM EVALUATION INTERVIEW PROTOCOL

1. Provide a brief description of the purpose of the evaluation.
2. Ask the KII of the extent of his/her involvement with the MLED project.
3. Request a description of the interaction of your institution with the MLED project.
4. Ask about the quality of the personnel provided by MLED.
5. Ask about the quality of any training provided by MLED, along with information about subsequent changes in procedures or actions by your institution.
6. Ask about your overall impression of the MLED project.
7. Ask if your institution favors a two-year extension of the project.
8. If the response is affirmative to the previous question, ask what changes you consider desirable during the final two years of the project.
9. Ask if any activities undertaken by the project will be sustainable after the project ends.

ANNEX G: SYNOPSIS OF MLED EVALUATION FINDINGS IN SPANISH

RESUMEN EJECUTIVO

El contrato de MLED fue asignado a Tetra Tech el 10 de Noviembre de 2011, cinco meses después de haber lanzado la licitación. El programa tuvo que sortear algunas dificultades iniciales ya que México tuvo elecciones presidenciales en Julio de 2012, y las leyes mexicanas restringen contactos con funcionarios gubernamentales en las etapas previas a las elecciones.

El programa MLED, que incluye asistencia técnica así como fondos de dinero perdido, fue otorgado durante el periodo del Presidente Felipe Calderón, quien tenía un interés personal en el combate al cambio climático, y en su periodo México se convirtió en una referencia internacional en este tema, al hacer compromisos firmes para la reducción de emisiones. El Presidente Enrique Peña Nieto tomó posesión en Diciembre de 2012, al término del primer año del proyecto. Las dudas iniciales acerca del compromiso de la actual administración en el combate al cambio climático fueron disipadas gradualmente, al renovar los compromisos y el liderazgo de México en la reducción de emisiones.

Una vez que se establecieron los nuevos mandos en los principales socios gubernamentales del proyecto (SEMARNAT, INECC, SENER), el proyecto comenzó a moverse rápidamente, se estableció una relación cercana con estas instituciones, y se ofreció ayuda técnica en temas de cambio climático y reducción de emisiones. Los principales logros del proyecto hasta el momento incluyen:

- La nueva línea base de emisiones que según los entrevistados tiene una mejoría sustantiva en referencia a la anterior y les resulta mucho más útil.
- El desarrollo de las curvas de costo de abatimiento ha sido una contribución valiosa.
- El concepto de MRV parece ser una herramienta muy importante para las instituciones mexicanas, aunque algunas instituciones requerirán entrenamiento adicional sustantivo si es que se pretende que se internalice esta metodología.
- El entrenamiento provisto parece haber sido efectivo, aunque no se realizó ningún esfuerzo para validarlo. (Una evaluación más completa del entrenamiento provisto debió haber incluido cuestionarios a participantes de forma aleatoria.)
- El trabajo con NAFIN parece ser de una alta efectividad y tener una perspectiva promisoriosa en el futuro. Un DCA apoyaría aún más este esfuerzo.
- Sorprendentemente, para el equipo evaluador, la colaboración con PEMEX parece haber sido bastante efectiva, y con posibilidades de tener efectos muy importantes en las emisiones de esta enorme empresa paraestatal.
- El apoyo de este proyecto parece que tendrá un efecto sustantivo en el alcance de las actividades del FIDE para lograr reducciones en los costos energéticos de las PYMES.
- El trabajo con dos entidades estatales (Morelos y DF) parece haber sido efectivo y bastante apreciado. Si estos gobiernos locales son capaces de continuar con las actividades planeadas, podrán servir como modelos para ser replicados por otros gobiernos estatales.

Recomendamos que este proyecto se extienda por otros dos años más. El progreso hecho hasta la fecha ha sido sustantivo, y mucho se podrá lograr con esta extensión. El liderazgo de Tetra Tech es reconocido por las contrapartes mexicanas, y las contribuciones técnicas son muy valoradas.

Si se decide extender el proyecto, se deberá prestar mayor atención al flujo de comunicación entre MLED y SEMARNAT y el INECC. Ambas instituciones manifestaron que sería conveniente mantener reuniones más frecuentes y así como un mayor intercambio de documentos.

El plan de trabajo del año 3, con una lista de 167 actividades, parece ser muy ambicioso motivo por el cual muchas de estas actividades se encuentran retrasadas, o no han sido iniciadas. Se recomienda que USAID se reúna con el staff de Tetra Tech para revisar la lista de actividades para alcanzar un acuerdo en el que se eliminen del plan de trabajo aquellas actividades que no son prioritarias, o que tienen pocas posibilidades de ser completadas.

ANNEX H: ANNOTATED BIBLIOGRAPHY

Outside Studies

“The Poverty Impact of Climate Change in Mexico”, by Alejandro de la Fuente and Marcelo Oliviera Villarroel, Policy Paper No. 6461, World Bank, May 2013.

- This paper attempts to measure the impact of climate change on poverty in Mexico in 2030 by considering its impact on temperatures and rainfall in different parts of the country. The main conclusion is that poverty will be modestly higher in Mexico due to global warming than it would be without climate change.

“Tools for Measuring the Costs and Benefits of Green Growth in the United States and Mexico,” by Winston Harrington, Richard Morgenstern and David Velez-Lopez, Policy Reform Working Paper No. 6242, October 2012, World Bank.

- This paper analyzes regulations in the United States and Mexico relating to emissions control. Its analytical framework is more theoretical than practical, so the paper provides no clear conclusions about the impact of greener growth on employment or economic growth.

Plan de Acción Climática, Petroleos Mexicanos, 2013.

- This document describes the issues facing PEMEX in implementing emissions-reduction activities. It also provides a general summary of all PEMEX activities in exploration, production and distribution of hydrocarbons.

Plan Nacional de Desarrollo 2013-2018. Publicado por el Gobierno de los Estados Unidos Mexicanos. Objetivo 4.4. Impulsar y Proyectar un Crecimiento Verde Incluyente y Facilitador que preserve nuestro patrimonio al mismo tiempo genera riqueza, competitividad y empleo. <http://pnd.gob.mx/>.

- This document identifies the importance of energy efficiency in the future growth of production and employment in Mexico.

USAID Reports

Audit of USAID/Mexico’s Global Climate Change Program, Audit Report No. I-523-13-006-P, Office of USAID Inspector General, June 20, 2013.

- This is an audit of MLED and a sister project, M-REDD. The inspectors complained about the slow start-up of both, especially M-REDD.
- It includes a number of recommendations for MLED, mostly concerned with clarity and frequency of reporting and monitoring activities. It also recommended increased efforts to assure the security of contract personnel in high-risk areas of the country. The report recommendations appear to have been implemented by the MLED project subsequent to the IG audit.

Project Studies

What are the Next Steps? Legal Perspectives on Mexico’s General Law on Climate Change, The Mexico-US Climate Law Network, Second Edition, 2013.

- This document includes Mexico's Climate Change Law in both English and Spanish, along with expert commentaries by 18 individuals. The commentaries include analyses of the challenges of implementation of the law, and possible next steps in implementing a climate-change policy.

Update of Mexico's Emissions Baselines and Mitigation Portfolio. May 2013.

- This is one of the most important basic documents of the MLED Project, updating an earlier study about which many questions had been raised.

Análisis actualizado de la línea base de emisiones de GEI de México, curva de costo marginal de reducción y cartera de proyectos

- This is the second basic contribution of the project, providing a marginal-cost analysis of various alternative means for reducing emissions in Mexico.

Principales Factores para la Viabilidad Comercial y el Financiamiento de Proyectos de Energía Solar en México, 18-19 September, 2013.

- This is one of a series of documents for a two-day workshop hosted by MLAD on the issues relating to solar energy in Mexico.

El estado de los sistemas de medición, reporte y verificación (MRV) a nivel internacional. Lecciones para la implementación de los programas de "Acciones nacionales apropiadas para la mitigación (NAMAs)" y "Estrategias de desarrollo bajo en emisiones (LEDS)" Rev. 1.

- This was another important contribution of the Project, providing considerable insights into how MRV systems should be implemented, along with insights on creation of NAMAs.

MLED Project Reports

These documents included the annual reports for 2012 and 2013, quarterly reports throughout the project, and work plans for 2013 and 2014.

- As one would expect, these reports provided considerable detail on the plans and accomplishments of the MLED Project, providing the evaluation team with much of the information needed to carry out the evaluation.

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