USAID/Colombia’s Clean Energy Program Faced Delays in Achieving Intended Results

REPORT 1-514-17-002-P
MAY 5, 2017

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MEMORANDUM

FROM: May 5, 2017

TO: USAID/Colombia Mission Director, Peter Natiello
    USAID’s Office of Acquisition and Assistance Director, Roy Plucknett

FROM: Regional Inspector General/San Salvador, Jon Chasson /s/

SUBJECT: USAID/COLOMBIA’S CLEAN ENERGY PROGRAM FACED DELAYS IN ACHIEVING INTENDED RESULTS (Report No. 1-514-17-002-P)

This memorandum transmits our final report on the subject audit. The audit objective was to determine whether the program increased access to renewable energy sources and energy-efficient practices in Colombia.

In finalizing the report, we considered your comments on the draft report and included them in their entirety, excluding attachments, in appendix II. The report contains 15 recommendations to help the mission and the Agency address issues identified in the audit.

After reviewing information provided in response to the draft report, we acknowledge management decisions on recommendations 1-14 and final action on recommendations 1 and 5-14. No management decision has been made on recommendation 15 pending determination of the allowability of questioned costs.

We disagree with the mission’s management decisions on recommendations 6 and 8. For recommendations 2, 3 and 4, please provide evidence of final action to the Audit, Performance and Compliance Division.

Thank you for the assistance extended to us during this audit.
SUMMARY OF RESULTS

Colombia’s central electrical grid covers 60 percent of the country’s territory and provides energy to 96 percent of the population. Nevertheless, 470,000 households are not connected, among them 55,000 in rural areas. To make the country, which was emerging from five decades of civil conflict, “more capable of successfully implementing a sustainable and inclusive peace,”¹ USAID committed to working with the Colombian Government to strengthen environmental resilience. This meant increasing the efficiency of its current energy practices, boosting production of renewable energy, and modernizing the national grid to meet the needs of underserved rural areas—many home to indigenous ethnic groups.

On January 10, 2012, USAID/Colombia signed an $18.7 million, 5-year, cost-plus-fixed-fee, completion-type contract with Tetra Tech ES Inc. to implement the Colombia Clean Energy Program. Its goal was “to increase access to renewable energy sources and energy efficient practices . . . through a combination of project development support, technical assistance, and enabling environment reforms.”

The objective of this audit was to determine whether the program increased access to renewable energy sources and energy-efficient practices in Colombia. USAID/Colombia has reported some achievements. For example, it supported the Colombian Government in developing regulations and decrees to facilitate tax incentives for renewables and for energy-efficient practices. It also provided funding and technical assistance to 11 Colombian companies for buying and using energy-efficient equipment. For instance, the program helped three brick factories improve their kilns with heat-recovery systems, and two fabric factories reduce coal consumption with new control panels in their industrial boilers.

However, disappointing results on the main performance indicators show that at the time of the audit, the program had not increased access as expected.

- **Anticipated increase in clean-energy generation.** The first indicator measured the capacity for clean-energy generation achieved through the program’s assistance, with a goal of adding 502 kilowatts by program end. However, the program had added only 55 kilowatts of clean energy capacity at the 4-year point—11 percent of its goal.

- **Expected energy savings from energy efficiency or energy conservation.** This indicator had a target 1.5 billion kilowatt hours saved by program end but had saved only 272 million at the 4-year point—18 percent of the goal.

The program was also behind on four indicators related to reduced greenhouse gas emissions and increased employment. As a result, at the time of the audit the program had fallen short of its goals.

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In addition, we identified the following program management and monitoring issues:

- The mission needed to make course corrections. The mission approved changes to performance measures when delays put their targets out of reach, but it did not resolve the root causes of the delays.

- The mission allowed the contractor to fund projects that did not meet program objectives. None of the projects had cost assessments done, and the mission should not have approved 3 of the 15 grants the audit tested.

- The mission ignored the contractor’s use of noncompetitive practices. Because the contractor hired an affiliate, the program incurred excess costs, limiting the funds available for achieving goals.

- The mission did not ensure that the contractor had appropriate internal controls. The contractor did not abide by local labor laws, assess local subcontractors’ ability to safeguard U.S. Government funds, or follow proper procurement procedures, and the mission did not address these issues.

Although the contract was close to completion, the Colombia Clean Energy Program highlights the need for USAID to be more proactive in monitoring implementers’ management of Federal funds and program performance. Specifically, USAID must do more to identify obstacles to achieving program goals, promptly make any needed course corrections, and monitor implementers’ adherence to program objectives and applicable requirements, while complying with contracting practices and internal control standards. Doing so would promote more effective development programs and better protect USAID funds from fraud, waste, and abuse.

Accordingly, we made 15 recommendations to improve the contractor’s program management, enhance the mission oversight of final program activities, assess lessons learned, and put in place new controls that could benefit future development projects. Detailed findings and recommendations follow. Appendix I describes the audit scope and methodology.
AUDIT FINDINGS

Mission Needed To Make Course Corrections To Keep Program on Track

Agency guidance requires mission staff to monitor contractor attention to quality and schedules and to resolve problems quickly when they arise. It also maintains that staff should adjust plans or make new ones when necessary to meet goals, and recommends the use of after-action reviews to promote continuous improvements.

During the Clean Energy Program, significant problems arose that required course correction by the mission.

• **The program struggled to meet the cost-sharing requirement.** According to the contract, project activities should be implemented through grants co-funded by USAID and local partners. Thus, for each activity, USAID would provide up to 50 percent of the funding and the contractor was required to obtain the remaining funds from external sources (i.e., grantees, the private sector, the Colombian Government) before project initiation.

   According to the contractor, grantees working with underserved populations could not meet the cost-sharing requirement, and the private sector did not want to invest in underserved areas. The contractor had to rely on the Colombian Government to support grant activities, and its funding and in-kind assistance took considerable time to arrange and confirm. Because the cost-sharing requirement was difficult to meet, many activities did not get started on time. As a result, the project made limited progress towards its intended outcomes during the first 2 years.

• **The program encountered delays getting approvals.** The program needed Colombian Government agencies to approve work in rural areas. However, Colombian Government approval requires full engineering plans and environmental licensing, which took the program time to acquire. The contractor must also get approval at the state and local levels, particularly in Afro-Colombian and indigenous areas, causing further delays and limiting activities. Getting the required community approval through the Ministry of Interior created an additional 6-month delay.

Mission staff and the contractor recognized as early as March 2013 that the program was not on track to achieve its goals. They made contract adjustments at the beginning of the third year—for example, the mission changed the cost-sharing requirement from a per-activity basis to a cumulative goal across all activities, and eliminated the specific number of communities to

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2 Automated Directives System 202.3.6, “Monitoring Quality and Timeliness of Key Outputs” Note: Effective September 7, 2016, USAID replaced ADS chapter 202 and 203 with revised chapters 200 and 201. However, ADS 202 was in effect during this audit.
be assisted—but the mission did not help the contractor obtain the various approvals needed to begin activities.

As a result, the program was not on track to achieve all of its goals. It fell short on targets for all the indicators that measure the program’s higher-level results, performing best on employment gains, which reached 35 percent of the target (table 1).

Table 1. Progress on Outcome Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Program Target</th>
<th>Result Through Year 4</th>
<th>Percentage of Program Target Completed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greenhouse gas emissions reduced, sequestered, or avoided as a result of U.S. Government (USG) assistance (metric tons of carbon dioxide equivalent)</td>
<td>100,000</td>
<td>11,192</td>
<td>11</td>
</tr>
<tr>
<td>Clean energy generation capacity installed or rehabilitated as a result of USG assistance (thousands of kilowatts)</td>
<td>0.502</td>
<td>0.055</td>
<td>11</td>
</tr>
<tr>
<td>Beneficiaries with improved clean energy services due to USG assistance</td>
<td>16,000</td>
<td>2,098</td>
<td>13</td>
</tr>
<tr>
<td>Expected energy savings from energy efficiency or energy conservation as a result of USG assistance (thousand kilowatt-hours)</td>
<td>1.5 million</td>
<td>271,909</td>
<td>18</td>
</tr>
<tr>
<td>Greenhouse gas emissions projected for the entire program reduced, sequestered, or avoided as a result of USG assistance (metric tons of carbon dioxide equivalent)</td>
<td>495,000</td>
<td>126,720</td>
<td>25</td>
</tr>
<tr>
<td>People gaining or improving employment as a result of clean energy program interventions</td>
<td>2,000</td>
<td>698</td>
<td>35</td>
</tr>
</tbody>
</table>

* OIG analysis of Agency-provided data, as of September 30, 2015.

It would be prudent for the mission to (1) work with the contractor to develop a plan to identify which activities can be still completed and (2) assess whether it can reprogram any unspent funds for better use. Finally, in accordance with Automated Directives System (ADS) 202, the mission is still responsible for conducting an after-action review to assess what to change during planning and implementation for future programs.

To address these matters, we make the following recommendations.

**Recommendation 1.** We recommend that USAID/Colombia work with Tetra Tech ES Inc. to develop a work plan for completing as many of the activities, expected results, and indicator targets as possible.

**Recommendation 2.** We recommend that USAID/Colombia provide written feedback to Tetra Tech ES Inc. on areas of its performance that need improvement to achieve all outstanding contract requirements.
**Recommendation 3.** We recommend that USAID/Colombia determine how much funding will be spent in the time remaining, and reprogram any funds that will not be used.

**Recommendation 4.** We recommend that USAID/Colombia conduct an after-action review to determine what type of programmatic changes should have been made and account for them in future development objective planning.

**Mission Allowed Contractor To Fund Projects That Did Not Meet Program Objectives**

According to the contract, the program’s grants would support renewable energy and electrification projects in rural communities and projects to promote investment in energy-efficiency and renewable energy in the private sector. These projects would have to include operation and maintenance cost estimates to support sustainability plans, and maintain a sound internal control environment. The contract also states, “Pilot projects utilizing expensive or unproven technology will not be considered for support.”

We found that the contractor had not completed the required sustainability plans. There were no estimates for the operation and maintenance costs for any of the 15 grants tested, which totaled $1,282,965 in USAID funds. The contractor had financial documents from the subgrantees, but no documented evaluation of their technical and institutional abilities to achieve results and safeguard USAID assets.

Furthermore, we found that 2 of the 15 grants tested supported technology that was not proven effective for the project’s target grant recipients. These two grants were used to purchase gasifier technology for Bogota’s botanical gardens—an urban area already connected to a clean energy source. A technical evaluation concluded that this technology was not appropriate for Colombia’s rural communities because the gasifiers were labor intensive, needed a lot of land, and used only specific types of vegetation as fuel; thus, it was not proven effective for use in the communities USAID defined as the program’s focus. In addition, while the technology also served as a demonstration project, we found this use did not align with the contract’s intent for the grants to help finance improved energy projects in rural communities or the private sector.

Also, another of the 15 grants tested provided access to water—rather than energy—for Guajira’s Wayuu community. According to the project description, the grant would support 11 solar water pumps and 31 manual pumps in the community. However, the contractor conducted no sustainability study for this project, which would have found that the high salinity in the local water would shorten the life of the pumps. The audit team noted that Cerrejón, a program grant recipient, had implemented this project as its third attempt to provide the Wayuu with water. Two previous projects had provided diesel and wind-power equipment that no longer functioned because the Wayuu lacked money for its maintenance.

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3 The Wayuu are an indigenous ethnic group.
As a result, the program spent almost $1.3 million on 15 grants that had no studies to document how communities would sustain their operation and maintenance costs. Two of these 15 grants supported gasifier technology; another supported a water project unrelated to providing access to energy. We believe these grants represent ineligible questioned costs—a potential waste of development funds.

A root cause was that the contractor’s grants manual did not include any language prohibiting unproven technology. Further, the contractor selected subgrantees with projects that would result in the greatest number of beneficiaries rather than those that would comply with program requirements.

Supporting projects that did not meet the objectives of the grants program and might be unsustainable has diverted USAID funds from their intended purpose.

To address these matters, we make the following recommendations.

**Recommendation 5.** We recommend that USAID/Colombia issue written instructions to Tetra Tech ES Inc. to update its grants manual to include the contract prohibition on grants for unproven technology, and then follow the manual in determining which projects qualify.

**Recommendation 6.** We recommend that USAID/Colombia determine the allowability of $1,282,965 in ineligible questioned costs charged to the Clean Energy Program for grants that did not meet the objectives of the program, and recover from Tetra Tech ES Inc. the amount determined to be unallowable.
OTHER MATTERS

Mission Did Not Ensure Contractor Used Competitive Practices for Awarding Subcontract

Government contracting rules require agencies to use competitive procedures to award contracts, with limited exceptions. The rules also require fair and reasonable prices for contracts, using data provided by the bidders. According to USAID regulations, when contractors have conflicts of interest, they must disclose them in writing to the contracting officer, along with any plans they have to end the conflicts. USAID reserves the right to terminate contracts in conflict.

The mission selected the program's contractor, Tetra Tech ES Inc., through a competitive process that included three other proposals. To implement portions of the program, the contractor subcontracted to an affiliate, Tetra Tech ARD. The affiliate got the largest subcontract for this program, receiving $7.9 million, 60 percent of the program's subcontract budget. The affiliate also appeared in the contractor's initial proposal as its main subcontractor.

The contractor gained unfair advantage with its affiliate ARD in its proposal. It presented lower costs by reporting them as the affiliate's subcontractor costs rather than its own administrative costs. Additionally, its fixed fee seemed lower at $679,541, when it actually totaled $865,501 with the affiliate's fixed fee added in. The contractor also misrepresented its subcontract amounts by not separating the affiliate's costs, giving the appearance of more funds going to beneficiaries than actually planned. Table 3 provides amounts from the four proposals.

Table 3. Memorandum of Negotiation: Analysis of Cost Proposals ($)*

<table>
<thead>
<tr>
<th>Cost Elements</th>
<th>Competitor 1</th>
<th>Competitor 2</th>
<th>Competitor 3</th>
<th>Tetra Tech ES</th>
<th>Tetra Tech ES/ Tetra Tech ARD Adjusted $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Direct Labor</td>
<td>2,933,469</td>
<td>1,784,772</td>
<td>3,878,274</td>
<td>1,033,760</td>
<td>2,063,108</td>
</tr>
<tr>
<td>Total Fringe Benefits</td>
<td>1,342,830</td>
<td>903,903</td>
<td>1,783,944</td>
<td>551,427</td>
<td>999,990</td>
</tr>
<tr>
<td>Total Travel</td>
<td>518,544</td>
<td>708,123</td>
<td>460,455</td>
<td>168,777</td>
<td>437,777</td>
</tr>
<tr>
<td>Total Indirect Cost</td>
<td>2,806,466</td>
<td>3,294,897</td>
<td>2,013,618</td>
<td>1,860,070</td>
<td>2,650,891</td>
</tr>
<tr>
<td>Fixed Fee/Profit</td>
<td>575,958</td>
<td>490,823</td>
<td>599,144</td>
<td>679,541</td>
<td>865,501</td>
</tr>
<tr>
<td>Total Subcontracts</td>
<td>2,785,896</td>
<td>4,069,307</td>
<td>3,544,848</td>
<td>9,572,797</td>
<td>6,038,764</td>
</tr>
</tbody>
</table>

* Colombia Clean Energy Program (SOL-514-11-000003) Memorandum of Negotiation.

b OIG analysis.

5 USAID Acquisition Regulation 752.209-71. See also FAR Subpart 9.5.
Moreover, the contractor did not hold the affiliate to the same standards as other subcontractors:

- Despite the affiliate’s status as the largest subcontractor, the contractor never established goals or targets for the affiliate, despite establishing them for its other subcontractors.

- Although all subcontractors received fixed-fee payments, the contracts with the others would reduce that fee if the work did not match the payment. The contractor did not hold the affiliate to this standard, although the affiliate did 60 percent of the subcontracted work.

- The affiliate’s subcontract excluded standard clauses that apply to all USAID contracts and subcontracts. For instance, the subcontract between the affiliate and the contractor did not include standard language prohibiting potential conflicts of interest.

The relationship between the contractor and the affiliate differs from other subcontractor relationships. The affiliate has staff reporting directly to the contractor’s chief of party and not to the affiliate’s supervisors, indicating they are one company and not in a contractor-subcontractor relationship.

The contractor asserted that it gave the affiliate the subcontract because of the affiliate’s experience with community development and the region. Furthermore, the contractor claimed that USAID approved the affiliate during the proposal evaluation. It also stated that it has engaged in this affiliate-subcontractor practice in USAID programs around the world—raising concerns about whether noncompetitive practices have been used on other USAID programs. USAID/Colombia stated that it did not realize that the subcontractor and the contractor were affiliates. This statement contradicts the negotiation memorandum, which noted that the mission had identified the affiliate relationship but did not evaluate the potential conflict of interest, lacking proper guidance from the Office of Acquisition and Assistance.

The special treatment extended to the affiliate deviates from full and open competition. USAID may be overpaying overhead (originally presented as subcontract costs) for the program’s contracted services.

To address these matters, we make the following recommendations.

**Recommendation 7.** We recommend that USAID/Colombia review any awards by Tetra Tech ES Inc. to affiliates and require those entities to disclose all potential conflicts of interest between themselves and any other affiliated companies related to noncompetitive pricing practices, and provide any findings to the Office of Acquisition and Assistance in Washington.

**Recommendation 8.** We recommend that USAID/Colombia implement an Agency-contracted audit of Tetra Tech ES Inc. and its subcontractor Tetra Tech ARD to determine if the practice of hiring an affiliate has resulted in excessive costs to the program that might be recovered.

**Recommendation 9.** We recommend that USAID/Colombia issue written instructions to Tetra Tech ES Inc. to modify the intercompany subcontract agreement it has with Tetra Tech
ARD to tie payment of fees to achievement of targets and to include all applicable clauses required in other subcontracts to resolve the special treatment given to it.

Because the contractor claimed awarding subcontracts to affiliated companies is a common practice around the world, we make the following recommendations to the Office of Acquisition and Assistance.

**Recommendation 10.** We recommend that USAID’s Office of Acquisition and Assistance determine if Tetra Tech ES Inc.’s bidding practice of including affiliated companies as subcontractors violates fair competition requirements and if any of these awards should be terminated because of conflicts of interest.

**Recommendation 11.** We recommend that USAID’s Office of Acquisition and Assistance, if it determines that Tetra Tech ES Inc.’s bidding practice is fair, implement guidance for bidders on how to present costs of affiliated companies in contract proposals, and for its staff on how to review and evaluate such proposals.

**Mission Did Not Ensure Contractor Had Appropriate Internal Controls**

Government and Agency acquisition regulations note that while the responsibility of managing subcontracts belongs to the prime contractor, the contracting officer and contracting officer’s representative of the mission must evaluate the prime contractor’s management of its subcontracts as well as the prime’s performance overall. Regulations also state that contractors must take responsibility for internal control for themselves and their subcontractors.

However, we identified areas where the contractor lacked appropriate controls, which the mission did not address.

**Contractor May Not Have Adhered to Local Labor Laws.** Colombian Labor Code Article 23 and 34 differentiate between employees and independent contractors. Under employment contracts, the employer decides the work methods, enforces a regular schedule and supervision, and offers benefits like vacation and retirement plans. In contrast, independent contractors gain the freedom to structure their own work methods and schedules but lose eligibility for benefits.

We noted uneven application of these laws. Four of the five consultants reviewed had fixed schedules under the direct supervision of the program director for a fixed amount per month. Nonetheless, these individuals did not receive benefits because Tetra Tech ES Inc. classified them as consultants.

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6 FAR 42.202(e) (2) and USAID Acquisition Regulation 742.1170-3.
7 FAR subpart 9.1 and FAR subpart 9.104-1.
Tetra Tech ES Inc. explained to us that it had hired the consultants as independent contractors in order to align with allowable expenses in the contract budget. The mission was not engaged in monitoring Tetra Tech ES Inc.’s hiring of consultants. By failing to properly classify them as employees and provide them with benefits, Tetra Tech ES Inc. placed USAID at risk of breaking local labor laws, incurring fines and damaging relations with Colombian Government.

To address this matter, we make the following recommendation.

**Recommendation 12.** We recommend that USAID/Colombia review Tetra Tech ES Inc.’s consultancy agreements to verify compliance with Colombian labor laws.

**Contractor Did Not Complete Risk Assessments for Local Nongovernmental Organizations.** The contract requires that all payments made with grant funds comply fully with Agency guidance. To comply, the contractor must perform risk assessments of nongovernmental organizations before awarding grants. Agency guidance gives flexibility on the type of assessment to conduct, both of which have these objectives:

- Determine whether the organization has sufficient financial and managerial capacity to manage USAID funds in accordance with U.S. Government and USAID requirements.
- Determine the most appropriate method of financing for the potential USAID award.
- Determine the support and oversight necessary to ensure proper accountability for funds provided to the organization.

For 2 of 15 local subcontractors tested during the audit, the contractor had conducted an assessment but had not completed it in accordance with USAID regulations. Specifically:

- For Corporacion Ambiental Empresarial, the contractor did an assessment but could provide no evidence that it tested for fund accountability. This was especially important since the local NGO had not conducted any prior business with USAID.
- For Cerrejon, the contractor did not complete the assessment. The contractor’s staff filled out some sections but left notes saying they could not complete the rest.

According to the contractor, the staff conducting the assessments had no experience with them. The mission was not aware of this because they rely on the contractor doing this type of work, which is not reviewed by the mission. By not completing the assessments, the contractor risked taxpayer funds and did not fully support the capacity building of local NGOs.

To address this matter, we make the following recommendation.

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8 ADS 303.
9 ADS 303.3.9.1 gives the option of conducting a Non-U.S. Organization Pre-Award Survey or an analysis with the above objectives.
Recommendation 13. We recommend that USAID/Colombia require implementers to provide the mission with the assessments they conducted, and evaluate them to confirm that they are conducted in accordance with regulations.

Contractor Procured Goods and Services Without Competition. The procurement manual for the program required full and open competition as defined in the government contracting rules, awarding grants by price, technical capacity, or both. The manual also required public notices for the competition. In addition, Government acquisition regulations make the prime contractor responsible for billing only allowable costs and USAID’s contracting officers responsible for paying only allowable expenses.10

The contractor did not comply with requirements as follows:

- For 5 out of 15 grants tested, the contractor used invitation-only bidding rather than open bidding. We also noted that the contractor did not have documentation on how it selected invited companies.

- For 3 out of 15 grants tested, the contractor conducted no bidding. The contractor chose one grantee for three of its subcontracts because the grantee offered to cover 50 percent of its consultancy costs. The contractor did not conduct a market study to validate these costs.

- For 9 out of 15 grants tested, the contractor limited advertising to posting on its Web site rather than by issuing a public notice.

- For 12 out of 15 grants tested, the contractor did not document its evaluation of the vendor's resources and internal controls.

- For 3 out of the 5 consultants tested, the contractor did so without bidding or advertising, which result in total ineligible questioned costs of $126,829.

- For 1 of the 5 consultants tested, the consultant fees charged seemed high, at $450 a day, and did not include documentation of market rates for these services.

- For 1 out of 6 subcontracts tested, the contractor conducted no bidding or advertising for subcontractors, but hired a legal firm it had worked with before resulting in ineligible questioned costs totaling $5,660.

- For 1 out of 6 subcontracts tested, the contractor did not conduct open advertising resulting in ineligible questioned costs totaling $59,617.

The contractor attributed these shortcomings to a lack of suitable vendors in Colombia but did not properly document its justifications or seek approval from the USAID contracting officer.

10 FAR 52.216-7.
for not following the procurement manual and selecting from this limited pool. Although the mission reviewed documentation prior to approving expenses, staff did not notice this issue.

The contractor’s weak internal controls led to $192,106 in ineligible questioned costs: $65,277 related to two subcontracts and $126,829 related to three consultants.

To address these matters, we make the following recommendations.

**Recommendation 14.** We recommend that USAID/Colombia monitor and review expenses submitted by Tetra Tech ES Inc. to confirm that they are reasonable and allowable before paying them.

**Recommendation 15.** We recommend that USAID/Colombia determine the allowability of $192,106 in ineligible questioned costs charged to the Clean Energy Program for subcontracts and consulting fees incurred without the competition required by Tetra Tech ES Inc.’s manuals, through either a financial review or an Agency-contracted audit, and recover from Tetra Tech ES Inc. the amount determined to be unallowable.
EVALUATION OF MANAGEMENT COMMENTS

We provided USAID/Colombia with our draft report on December 20, 2016, and on February 14, 2017, received its response, which is included as appendix II to this report. After reviewing information provided in response to the draft report, we acknowledge management decisions on recommendations 1-14 and final action on recommendations 1 and 5-14. The mission had not made a management decision on recommendation 15. We disagree with the mission’s management decisions on recommendations 6 and 8. An evaluation of management comments follows.

**Recommendation 1.** The mission stated that while there had been significant delays during implementation, the contractor was successful in overcoming shortfalls in the final year and had met or exceeded all performance indicator targets. We reviewed the indicator table in the mission’s response and noted that the mission had reduced the PMP targets for two indicators (CO2 sequestered or avoided, climate change/biodiversity laws passed) from the program’s original goals. In subsequent correspondence, the mission confirmed that they had reduced these targets. We acknowledge the mission’s management decision and final action.

**Recommendation 2.** The mission noted that the program’s technical implementation concluded in December 2016 and that it pledged to document the contractor’s final performance report via the Contractor Performance Assessment Reporting System. The mission provided additional documentation confirming that it will complete the performance report by July 31, 2017. After reviewing the documents provided, we acknowledge the mission’s management decision.

**Recommendation 3.** In its comments, the mission confirmed that it would abide by USAID’s closeout procedures for final payments to the contractor. The mission subsequently confirmed that its target date for completion is March 30, 2018. We acknowledge the mission’s management decision.

**Recommendation 4.** In its comments, the mission stated that it would conduct an after-action review and share its relevant findings within the mission. The mission subsequently confirmed that its target date for completion is March 30, 2018. We acknowledge the mission’s management decision.

**Recommendation 5.** The mission agreed that the gasifier technology was not ideal for many of the areas targeted by the program. However, they disagreed that the technology itself was unproven, and noted that it was being used in the Bogota botanical garden for demonstration purposes for visitors that needed to see the viability of the program. They also stated that no remaining subcontracts require approval; therefore, no further action is necessary. We acknowledge the mission’s management decision and final action.
Recommendation 6. The mission reviewed all subawards of the program and concluded that they supported program objectives. Based on this review, the mission determined that the questioned costs were allowable. We acknowledge the mission's management decision and final action, but we disagree with some aspects of their decision. Specifically:

- For the botanical gardens grant project, the mission disagreed that the technology was unproven. However, the mission conceded that for some rural regions, which were the main focus of the program as defined by USAID, this type of technology was “not ideal.” The mission further stated that the demonstration project allowed visitors to see the viability of the program, which supported Task 1 of the contract. We disagree that the gasifier project was an appropriate use of grant funds, since the contract specified that grants were intended to support projects under Task 2 (rural communities) and Task 3 (private sector investment).

- As part of the Wayuu water access project, the program funded 11 solar and 31 manual pumps that did not contribute to CO2 reductions or increased electrical power provided to the community. Further, the project’s activities replaced an existing manual water pump system that did not produce pollution. Thus, this project did not provide the local community access to a clean energy source and, in our opinion, did not represent an eligible program activity.

- The contractor did not complete feasibility plans utilizing the operation and maintenance costs for the 15 approved projects, as required by the contract. As an example, the Wayuu water access project, referenced above, was the third attempt to upgrade the existing system, though we note the previous attempts were not sponsored by USAID/Colombia. The two previous attempts failed because the community did not provide the required maintenance to the previous equipment.

Thus, while the mission did not sustain the questioned costs, we believe that these activities were not aligned with program objectives or the requirements of the contract.

Recommendation 7. The mission confirmed that it had conducted a review of its portfolio and found no other awards made by the contractor to one of its affiliates. Further, the mission stated that, besides this contract, the contractor does not hold any other awards with the mission that would require its affiliated companies to disclose potential conflicts of interest. We acknowledge the mission’s management decision and final action.

Recommendation 8. The mission stated that an Agency-contracted audit of the contractor would be duplicative of the audit conducted under the requirements of ADS 591.3.1.2 for U.S. for-profit organizations. The mission also stated that all contractual requirements for the contractor flowed to its subcontractor affiliate, notably conflict of interest disclosures and fixed-fee payment restrictions, and that all subcontractor costs were disclosed fully and clearly as part of the contractor’s technical and cost proposals.

We acknowledge the mission’s management decision and final action, but disagree with the decision. With the documentation provided to us during audit fieldwork, we determined that
Tetra Tech ES provided preferential treatment to its affiliate Tetra Tech ARD. For example, Tetra Tech ARD was not required to establish goals or targets to benchmark its performance, its fees were not reduced if it failed to achieve performance targets, and the conflict of interest clause was not included in its subcontract. While the mission is correct that Tetra Tech ES is subject to audit under the terms of ADS 591.3.1.2, this is an annual audit of all of the contractor’s incurred costs of USAID funds, which would not explicitly examine the costs and practices used by the contractor and its affiliate under this particular program. An Agency-contracted audit executed in accordance with ADS 591.3.6 would provide an additional safeguard for protecting taxpayer funds, verifying the allowability of affiliate costs, and validating the integrity of program activities undertaken by the contractor’s affiliate.

**Recommendation 9.** The mission noted that (1) the contract is scheduled to end in March 2017 and there would be no reason to amend subcontract agreements and (2) the prime contractor is legally responsible for overall contract performance, including managing subcontracts. We acknowledge the mission’s management decision and final action.

**Recommendation 10.** USAID’s Office of Acquisition and Assistance (OAA) confirmed that it reviewed all relevant documentation and determined that Tetra Tech ES did not violate fair competition requirements by subcontracting with Tetra Tech ARD and therefore the subcontract should not be terminated. We acknowledge OAA’s management decision and agree that final action has been taken on this recommendation.

**Recommendation 11.** OAA confirmed that its existing guidance for disclosing and analyzing technical and cost proposals of related parties is sufficient. We acknowledge OAA’s management decision and agree that final action has been taken on this recommendation.

**Recommendation 12.** The mission determined that the contractor obtained legal counsel from an accredited local law firm that confirmed the legality of its executed consultancy agreements. We acknowledge the mission’s management decision and final action.

**Recommendation 13.** The mission stated that the contractor has detailed procedures for grant assessments and that the contractor keeps the results of these assessments on file. The mission stated that evaluating these assessments to ensure the contractor’s compliance with these procedures would be labor intensive, and that doing so would negate the purpose of using contractors and subcontractors. We acknowledge the mission’s management decision and final action, as the contract is now over. However, we continue to maintain that because the mission is responsible for oversight of contractor and subcontractor activities, it should implement policies and procedures to ensure that grant evaluation assessments are performed in accordance with the contract requirements.

**Recommendation 14.** The mission confirmed that it had monitored and reviewed expenses per the terms and conditions of the contract and as stipulated by the contracting officer’s representative letter. We acknowledge the mission’s management decision and final action.

**Recommendation 15.** The mission stated that all costs proposed and charged were reviewed at the time of vouchering. However, in subsequent correspondence, the mission confirmed that
it would review the questioned costs and make a determination on eligibility by June 30, 2017. Because the mission has not determined the allowability of the questioned costs, a management decision has not been reached for this recommendation.
SCOPE AND METHODOLOGY

Scope

OIG conducted this performance audit from March 23, 2015, to February 1, 2016, in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions in accordance with our audit objective. We believe that the evidence obtained provides that reasonable basis.

On January 10, 2012, USAID/Colombia signed an $18.7 million, 5-year, cost-plus-fixed-fee, completion-type contract with Tetra Tech ES Inc. to implement its Clean Energy Program. As of September 30, 2015, USAID/Colombia had obligated about $12 million, and the program had spent about $8.8 million.

The objective of the audit was to determine whether this project increased “access to renewable energy sources and energy efficient practices in Colombia through a combination of project development support, technical assistance, and enabling environment reforms.”

In planning and performing the audit, the audit team assessed the internal controls the mission used to manage the program, including quarterly and annual performance reports, performance management plans, and annual work plans. We also reviewed contract documents and prior audit reports from the region for issues related to the audit objective.

We validated the data processed in the financial and procurement systems and quarterly reports; conducted site visits; and interviewed USAID/Colombia staff, Colombian Government officials, contractor staff, and beneficiaries. We reviewed reported results for accuracy. We conducted fieldwork in Colombia from October 19 through November 6, 2015. We visited three government institutions and several beneficiaries and projects in the communities of Palmor and Sabana Crespo in Sierra Nevada de Santa Marta, Riohacha in La Guajira, Medellin, and Bogota.

Methodology

To answer the audit objective, we reviewed program documentation and conducted interviews and site visits. We evaluated the mission’s management and oversight, the accuracy of reported results, and compliance with contract requirements and rules and regulations. We met with officials from USAID/Colombia including the contracting officer’s representative, contracting officer, and environmental officer. We held meetings with employees from the contractor and its subgrantees, including the chief of party, office director, program officers, and financial managers. We reviewed and analyzed relevant documents and data at the mission and at the contractor’s office in Bogota. We met with program beneficiaries including businesses, ministry officials, and indigenous communities.
To determine the progress made toward the program goals and answer the audit objective, we relied on computer-processed data contained in quarterly and annual progress reports prepared by the implementing partners using Microsoft Excel and Word. We assessed the quality of the data by reviewing a judgmental sample ranging from 14 to 100 percent of reported results for all 12 indicators and comparing them with supporting documentation as of September 30, 2015. We also conducted interviews and site visits to support the audit objective. These tests and interviews led us to conclude the data are sufficiently reliable to use in answering the audit objective.

The audit team conducted site visits at three of the five government institutions and activities that accounted for 57 percent of the money spent on activities in the communities of Palmor and Sabana Crespo in Sierra Nevada de Santa Marta, Riohacha, and Uribia in La Guajira; Medellin; and Bogota ($795,416 out of $1,384,073 as of September 30, 2015). We conducted these field visits to validate the use of funds and to document monitoring, reporting, and compliance with contracts, agreements and regulations. When selecting the activities, we considered dollar value, security, and accessibility of locations selected for site visits.

To test internal controls over procurement, the audit team judgmentally selected samples to support the audit findings. For the grants, we selected 15 out of 72 transactions, or 21 percent, or 63 percent of the monetary value. For subcontractors, we selected 6 out of 10 transactions, or 60 percent, representing $5.4 million out of $5.5 million, or 98 percent. For consultants, we selected all five transactions (the entire sample population).

Because we judgmentally selected the results, projects, and sites, we must limit the results and conclusions to the items and areas tested and cannot project them to the entire population. We believe our testing supports the audit’s findings.

To gain an understanding of the projects selected for testing, the audit team reviewed ADS and applicable regulations, the program contract and associated modifications, subagreements and subcontracts, the mission’s country development cooperation strategy, data quality assessments, the performance plan and report, and site visit reports. We also reviewed implementing partners’ work plans, progress reports, and other documents that supported the programs and the results reported to USAID.
MANAGEMENT COMMENTS

UNCLASSIFIED MEMORANDUM

DATE: February 10, 2017

TO: Regional Inspector General/El Salvador, David J. Clark

FROM: Mission Director, Peter Natiello /s/


USAID/Colombia acknowledges the observations and recommendations in the above referenced report, and welcomes the opportunity to provide responses to the findings and recommendations. USAID/Colombia considers that through the answers provided in this document it will be clear that the Colombia Clean Energy Program (CCEP) has indeed achieved its intended results, particularly in light of the fact that more than a year has passed since the audit was conducted and the draft report released. In addition, the draft report contains several inaccuracies and omits important factors that should have a bearing on the final report.

EXECUTIVE SUMMARY

USAID/Colombia’s management decision is that the Mission agrees with recommendations 3 and 4 and will take appropriate action. The Mission requests removal of recommendations 1,2,5,6,7,8,9,10,11,12,13,14, and 15 or their closure upon issuance of the report.

Recommendation 1. We recommend that USAID/Colombia work with Tetra Tech ES Inc. to develop a work plan for completing as many of the activities, expected results, and indicator targets as possible.

USAID/Colombia worked continuously, diligently and to the best of its ability to assure the program was on track to achieve its objectives. This resulted in numerous important course corrections, including several that have been taken since the Mission received the first preliminary report from the Regional Inspector General (RIG) in December 2015. It is also important to note that this was the first clean energy program for the Mission, that working in rural, conflict ridden rural Colombia is a highly challenging environment and that facing challenges during implementation is inherent in development work and that taking risks on new, innovative programs is encouraged within the Agency.

Energy infrastructure projects have regulatory requirements which require environmental permits
by corresponding regional or national authorities prior to (a) assuring co-financing commitments by public counterparts, and (b) embarking on implementation of physical installations. In addition, given the particular emphasis of the rural energy component on off-grid communities, which in Colombia largely coincide with indigenous and Afro Colombian territories, by Constitution and law projects are subject to formal social consultation (“consulta previa”) processes and in all cases must be channeled through (or exempted by) the Ministry of the Interior. This led to some unavoidable delays due to Colombian legal requirements and securing of approvals. The Mission and contractor did not accurately anticipate how long these approval processes would take and their significant impact on the contract. As a result, program investments required more time to achieve planned impacts than anticipated, but both the contractor and the Mission worked steadily to achieve program goals for emissions, energy generation and service, and employment, all of which were achieved by program completion.

As noted in the draft audit report, the progress on outcome indicators was below targets as of the time of the audit in 2015. However, while there had been significant delays accumulated over several years of implementation, the contractor was successful in overcoming shortfalls in the final year of implementation. As it stands now, the program is set to exceed program targets. For ease of reference, table 1 below shows that as of January 2017 preliminary final results exceeded program targets and therefore no outstanding actions remain. The program’s final report is due to be submitted by March 12, 2017 and will capture the final summary of activities completed and results obtained.

**Table 1**

<table>
<thead>
<tr>
<th>CCEP’s INDICATOR</th>
<th>CUMMULATIVE TOTAL 2016</th>
<th>PROGRESS Q1 FY 2017</th>
<th>TOTAL PROGRESS</th>
<th>PROGRAM TARGET</th>
<th>% COMPLETION</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHG emissions, estimated in metric tons of CO2e, reduced, sequestered, and/or avoided as a result of USG assistance</td>
<td>55,677.76</td>
<td>25,444.54</td>
<td>81,122.29</td>
<td>80,000.00</td>
<td>101%</td>
</tr>
<tr>
<td>GHG emissions, estimated in metric tons of CO2e, projected for the entire lifetime of projects, reduced, sequestered and/or avoided as a direct/indirect result of USG assistance</td>
<td>806,833.55</td>
<td>340,023.56</td>
<td>1,146,857.11</td>
<td>495,001.00</td>
<td>232%</td>
</tr>
<tr>
<td>Amount of investment mobilized (in USD) for climate change as supported by USG assistance</td>
<td>10,818,431.53</td>
<td>(2,410.24)</td>
<td>10,816,021.29</td>
<td>5,000,000.00</td>
<td>216%</td>
</tr>
<tr>
<td>Number of institutions with improved capacity to address climate change issues as a result of USG assistance</td>
<td>82.00</td>
<td>64.00</td>
<td>146.00</td>
<td>47.00</td>
<td>311%</td>
</tr>
</tbody>
</table>

The Mission requests removal of this recommendation, or closure upon issuance of the final report.
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<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of laws, policies,</td>
<td>12.00</td>
<td>(1.00)</td>
<td>11.00</td>
<td>10.00</td>
<td>110%</td>
</tr>
<tr>
<td>strategies, plans, or</td>
<td></td>
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<td></td>
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<tr>
<td>regulations addressing</td>
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<td></td>
</tr>
<tr>
<td>climate change (mitigation or</td>
<td></td>
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<tr>
<td>adaptation) and/or biodiversity</td>
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<tr>
<td>conservation officially</td>
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<tr>
<td>proposed, adopted, or</td>
<td></td>
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<tr>
<td>implemented as a result of USG</td>
<td></td>
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</tr>
<tr>
<td>assistance</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Number of person hours of</td>
<td>39,015.50</td>
<td>94,501.00</td>
<td>133,516.50</td>
<td>40,000.00</td>
<td>334%</td>
</tr>
<tr>
<td>training completed in</td>
<td></td>
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</tr>
<tr>
<td>climate change as a result of</td>
<td></td>
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<tr>
<td>USG assistance</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Expected lifetime energy</td>
<td>885,461.06</td>
<td>1,194,899.15</td>
<td>2,080,360.21</td>
<td>1,500,000.00</td>
<td>139%</td>
</tr>
<tr>
<td>savings from energy efficiency</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or energy conservation, as a</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>result of USG assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean energy generation</td>
<td>0.39</td>
<td>0.96</td>
<td>1.34</td>
<td>0.50</td>
<td>269%</td>
</tr>
<tr>
<td>capacity installed or</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rehabilitated as a result of USG</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean energy generation</td>
<td>0.15</td>
<td>0.93</td>
<td>1.08</td>
<td>0.24</td>
<td>451%</td>
</tr>
<tr>
<td>capacity supported by USG</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>assistance that has achieved</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>financial closure</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Number of beneficiaries with</td>
<td>10,775.00</td>
<td>12,339.00</td>
<td>23,114.00</td>
<td>16,000.00</td>
<td>144%</td>
</tr>
<tr>
<td>improved clean energy services</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>due to USG assistance</td>
<td></td>
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</tr>
<tr>
<td>Number of mitigation and/or</td>
<td>32.00</td>
<td>8.00</td>
<td>40.00</td>
<td>10.00</td>
<td>400%</td>
</tr>
<tr>
<td>adaptation tools, technologies</td>
<td></td>
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<tr>
<td>and methodologies developed</td>
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</tr>
<tr>
<td>Number of CCEP pre-investment</td>
<td>85.00</td>
<td>1.00</td>
<td>86.00</td>
<td>60.00</td>
<td>143%</td>
</tr>
<tr>
<td>activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of people gaining or</td>
<td>1,750.00</td>
<td>1,149.00</td>
<td>2,899.00</td>
<td>2,000.00</td>
<td>145%</td>
</tr>
<tr>
<td>improving employment, directly</td>
<td></td>
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<td></td>
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<tr>
<td>or indirectly, as a result of</td>
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<tr>
<td>clean energy program</td>
<td></td>
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<tr>
<td>interventions</td>
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</table>

**Recommendation 2. Provide written feedback to Tetra Tech ES Inc. on areas of its performance that need improvement to achieve all outstanding contract requirements.**

All technical implementation ended in December 2016 and as shown in table 1 for recommendation 1, all expected results were achieved. The time remaining until the contract end date of March 31, 2017 will be used for final report writing and administrative close out. The contractor final performance report will be shared via the Contractor Performance Assessment Reporting System (CPARS) as required by contract’s terms.

**The Mission requests removal of this recommendation, or closure upon issuance of the final report.**
Recommendation 3. We recommend that USAID/Colombia determine how much funds will be spent in the time remaining, and reprogram any funds that will not be used.

The contract is currently funded in the amount of $17,193,979.01, which is 8% below the contract ceiling of $18,654,890.00. We will follow Agency closeout procedures upon receipt of the final invoice and Negotiated Indirect Cost Rate Agreements (NICRA).

With this action, the Mission has reached a management decision.

Recommendation 4. We recommend that USAID/Colombia conduct an after action review to determine what type of programmatic changes should have been made and account for them in future development objective planning.

USAID/Colombia will conduct the recommended after action review with the contractor and relevant findings will be shared with the Mission.

With this action, the Mission has reached a management decision.

Recommendation 5. We recommend that USAID/Colombia issue written instructions to Tetra Tech ES Inc. to update its grants manual to include the contract prohibition on grants for unproven technology, and then follow the manual in determining which projects qualify.

USAID/Colombia does not concur with the audit’s assertion that unproven technology was installed under CCEP. The two examples presented in the draft audit report include solar technology (which is not classified as unproven technology and has a wide array of household applications, in addition to industrial developments around the world) and Biomass gasification technology (which is currently being used in heat, electricity and renewable energy and fuels; has been operating since the early 1970s and is now entering full commercial service).

Biomass gasification is a proven technology which is used worldwide. In one of its technical manuals, the United States Department of Energy’s (DOE’s) Solar Energy Research Institute went as far as asserting “Biomass gasification is perceived by the foreign aid agencies of the developed countries (such as the U.S. Agency for International Development [USAID]) as a major potential energy source for many parts of the developing world.”¹¹ There are many biomass gasification plants operating in USA, Europe, India, Asia, Africa, and New Zealand. There are many companies (equipment suppliers, developers, and engineering companies) devoted to the development of biomass gasification projects worldwide. The benefits are widely recognized as indicated in the following reference:

“Benefits of Biomass Gasification

- Converting what would otherwise be a waste product into high value products
- Reduced need for landfill space for disposal of solid wastes
- Decreased methane emissions from landfills

¹¹ Source: http://www.nrel.gov/docs/legosti/old/3022.pdf pg. 4
Appendix II

- Reduced risk of groundwater contamination from landfills”

(Source: http://www.gasification-syngas.org/applications/biomass-gasification/ )

In Colombia there are several companies that have installed this technology. For example, the Indian manufacturer ANKUR has already installed a number of woody biomass gasifiers in Colombia and even has a representation in Colombia [Acquaire, one of the proponents bidding for the Bogota Botanical Garden (BBG) project]. Most of the biomass gasifiers are at university installations in major cities (Bogotá, Barranquilla, Medellín), though the one mentioned in the PDF provided by the contractor to the auditors during their 2015 visit has been continuously operated at a farm in Santander by Dr. Thomas Reginald Preston for over seven years. The Instituto de Planificacion de Soluciones Energeticas para las Zonas no Interconectadas (IPSE) installed an Ankur gasification system to generate electricity for a rural locality of 40 families in Necoclí, Antioquia. Industrial scale gasifiers have been operating with rice husks in Tolima and Huila for a number of years, and are under evaluation in agroindustrial installations throughout Colombia.

More recently (2014), another USG-funded program supplied an identical APL 20 kW gasification system to the one CCEP installed at the BBG, to the Centro Nacional de Investigaciones de Café (CENICAFFE) as part of a U.S. Department of Agriculture (USDA) initiative under the technical guidance of Dr. A.A. Boateng of its Agricultural Research Service, to adapt for future use in Colombian coffee farms (CENICAFFE is the National Federation of Coffee Grower’s R&D center in Chinchiná, Caldas). Therefore, the technology has been and can definitely be further implemented in Colombia as a renewable clean energy option and the 20 kW scale per gasifier unit is optimal for demonstration and educational purposes.

Early in the program, CCEP staff completed technical field visits to geographic areas that were the main focus of the program as defined by USAID. These visits provided inputs necessary to determine that some of the regions visited were not ideal for this type of technology (just like hydro plants are not viable in areas with low water resources or solar plants are not viable in certain patches of land). Due to the vast differences between and within the regions covered by CCEP, particularly communities that are off-grid, a technology that may be appropriate for one region may not be appropriate in another region. CCEP took this consideration very seriously in the development of activities and ensured that technologies were appropriate for the environments in which they would operate.

For instance isolated gasification solutions are not ideal in the communities of Jovi and Coquí in the municipality of Nuquí, Chocó as they are in rainy tropical forests and exhibit other attenuating conditions. CCEP’s technical visits established that due to the lack of knowledge and familiarity in those zones with the technology, in addition to the lack of required physical conditions, necessary community commitments and lack of farming experience in fishermen communities such as Jovi-Coquí, a demonstration project under Task 2 was not an appropriate option to help disseminate the benefits of this proven technological solution. It is incorrect that this renewable energy option can only be used in unserved areas, and that is why it remained under consideration and was implemented under Task 1 at the Bogota Botanical Garden (instead of Task 2 focused on unserved areas).
The Bogota Botanical Garden is a municipal authority responsible for tree trimming and removal of unsafe trees from most public areas (parks, avenues, streets) of the city. It also manages the tree trimming and removal from within Garden boundaries. Other district authorities and utility companies harvest additional tree trimmings not tangibly available to the Garden. Prior to the CCEP BBG project, all the city’s woody biomass was inadequately disposed in the municipal landfill, generating voluminous methane emissions. Initial data reported in CCEP’s June 2013 technical document on direct BBG harvesting city-wide reached a minimum of 10 tons per day (10,000 kg), plus 500 kg within BBG limits. Operating about 8 hours per day, a 20 kW gasifier would require no more than 300 kg per day and demonstrate the advantages of renewable energy power generation in urban and metropolitan settings as part of Task 1’s Clean Energy Enabling Environment activities.

Additionally, the activities at the Bogota Botanical Garden were used for demonstration purposes for visitors that needed to see the viability of the program and were not able to travel to the remote locations in which the CCEP is being implemented. The site was inaugurated by USAID/Colombia Mission Director, and among those visitors was USAID Deputy Administrator Alfonso Lenhardt, Acting Assistant Administrator Beth Hogan, Assistant Administrator Eric Postel and others.

Since use of unproven technology is not a concern, and given the contract ends on March 31, 2017, and the fact that there are no subcontract approvals to be requested, this recommendation is obsolete.

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

Recommendation 6. We recommend that USAID/Colombia determine the allowability of $1,282,965 in ineligible questioned costs charged to the Clean Energy Program for grants that did not meet the objectives of the program, and recover from Tetra Tech ES Inc. the amount determined to be unallowable.

USAID/Colombia reviewed all sub awards in accordance with the terms of the contract and they were found to support program objectives. The technical office has determined that the questioned costs are eligible costs because they meet the objectives of the program.

The costs totaling $1,282,965 are questioned by the audit due to concern of at least one of the following reasons: 1) unproven technology, 2) unrelated to energy access, and 3) lack of sustainability study.

- Unproven Technology: As explained under recommendation 5, USAID does not concur that any unproven technologies have been used.

- Unrelated to energy access: Regarding the relationship to energy access, the draft report questions that “one of these projects provided access to water – rather than energy – for the Wayuu community in Guajira.” Under Task 2, however, CCEP’s mandate was to expand access to renewable energy sources in currently unserved (off-grid) areas – including an array of modern energy services and “productive use activities developed in rural areas stimulating rural economic development, for example, cold-chain..."
development or value-added product development utilizing clean energy” – in no way limited to “rural electrification” as narrowly assumed by the audit report. The project developed with Cerrejón Foundation fits squarely within the objectives of expanding access to renewable energy sources in off-grid communities stimulating rural economic development, allowing communities to incorporate drip irrigation and stabilize animal husbandry production for economic and food security purposes.

- Sustainability consideration: Regarding the sustainability considerations being taken into account, all projects considered operations and maintenance costs as integral factors in each project. In addition, project considerations included socio-entrepreneurial strengthening components geared to assuring system administration, and institutional allies to co-finance project investments and provide technical support and community accompaniment for at least three years after CCEP interventions end.

For example, the US$106,762.39 investment listed in Table 2 in the draft audit report tells only part of the story of the over US$470,000 investment mobilized in the Yucal indigenous micro hydro power project. In addition to the MHP construction subcontract, GOC ally IPSE channeled US$261,865 as counterpart funding for the power plant and distribution grid, and CCEP contributed US$106,762 in socio-entrepreneurial assistance, corn and rice milling installations and forest management components to assure technical, administrative and financial sustainability as well as long-term institutional support by the national rural energy development agency of the renewable energy investment. This project has been sustainably run by this jungle community since the end of 2014, supported 50% by household electricity tariffs and 50% by milling tariffs.

All questioned items comply with program objectives and include the type of pre-investment studies geared to identify project investment costs and operations and maintenance costs. Thus, USAID/Colombia disagrees that “these grants represent ineligible questioned costs – a potential waste of development funds.”

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

Recommendation 7. We recommend that USAID/Colombia review any awards by Tetra Tech ES Inc. to affiliates and require those entities to disclose all potential conflicts of interest between themselves and any other affiliated companies related to noncompetitive pricing practices, and provide any findings to the Office of Acquisition and Assistance in Washington.

Tetra Tech ES Inc. does not have any other awards to affiliated companies under the Colombia Clean Energy Program (CCEP). Additionally, the Office of Acquisition and Assistance in USAID/Colombia has reviewed its files and other than the existing award with Tetra Tech ES that is currently being reviewed by this audit, the Mission does not have any other awards with Tetra Tech ES that would require affiliated entities to disclose any potential conflicts of interest. Therefore, the recommendation is not applicable based on the Mission’s existing portfolio.

The Mission requests removal of this recommendation, or closure upon issuance of the final
Recommendation 8. We recommend that USAID/Colombia implement an Agency-contracted audit of Tetra Tech ES Inc. and its subcontractor Tetra Tech ARD to determine if the practice of hiring an affiliate has resulted in excessive costs to the program that might be recovered.

Since Tetra ES Inc. is a U.S.-based contractor it is governed by the FAR and will have an annual audit to determine the propriety of direct and indirect costs claimed by fiscal year under USG contracts. Because of that, USAID/Colombia considers that performing a separate Agency-contracted audit would be duplicative and overall more costly to the USG. Moreover, Tetra ES Inc. is subject of audit of its overhead (indirect) costs in order to establish a NICRA, thus it would not be reasonable for the Mission to request an additional audit of overhead.

Additionally, in accordance with the terms and conditions of the USAID/Colombia contract with Tetra Tech, all contract terms and conditions flowed down from the prime contract to the subcontract with Tetra Tech ARD, the affiliate performing the work, including conflict of interest requirements and restrictions on payment of a fixed fee. Tetra Tech ARD was required to meet more goals or targets than are defined for all other subcontractors under the CCEP contract.

Moreover, Tetra Tech ES treats its affiliate partners as a subcontractor as defined by the Automated Directives System (ADS) and Federal Acquisition Regulation (FAR). FAR part 31.205-26(e) addresses this issue specifically, and requires all “materials, supplies, and services that are sold or transferred between any divisions, subdivisions, subsidiaries, or affiliates of the [prime] contractor under a common control shall be on the basis of cost incurred…” Tetra Tech complies with this requirement by issuing Tetra Tech ARD a Cost Plus Fixed Fee (CPFF) type subcontract which requires all costs to be substantiated by a NICRA and proper supporting documents. Tetra Tech did not charge any additional fee to USAID for intercompany work.

All Tetra Tech ARD costs were fully and clearly disclosed in the proposal, and the information required for USAID to make a reasonableness determination was provided.

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

Recommendation 9. We recommend that USAID/Colombia issue written instructions to Tetra Tech ES Inc. to modify the intercompany subcontract agreement it has with Tetra Tech ARD to tie payment of fees to achievement of targets and to include all applicable clauses required in other subcontracts to resolve the special treatment given to it.

This contract is scheduled to end on March 31, 2017. Additionally and in accordance with FAR 44.203(a), the Contracting Officer’s consent to a subcontract does not constitute a determination of the acceptability of the subcontract terms. Likewise, the Contracting Officer should not be issuing instructions to the prime contractor to change the terms of a subcontract, unless it is not in line with the overall contract scope of work, objectives and expected results. Tetra Tech ES as the prime contractor has the legal and management responsibility for overall contract
performance, including managing subcontracts. While there is privity of contract between USAID/Colombia and Tetra Tech ES and between Tetra Tech ES and Tetra Tech ARD, there is no privity of contract between the U.S. Government and the subcontractor.

**The Mission requests removal of this recommendation, or closure upon issuance of the final report.**

**Recommendation 10.** We recommend that USAID’s Office of Acquisition and Assistance determine if Tetra Tech ES Inc.‘s bidding practice of including affiliated companies as subcontractors violates fair competition requirements and if any of these awards should be terminated because of conflicts of interest.

The Office of Acquisition and Assistance has reviewed the Solicitation, the documentation submitted by Tetra Tech ES as part of its Technical and Cost Proposal, the Memorandum of Negotiation for the base award, as well as FAR 44.2, and has determined that Tetra Tech ES did not violate fair competition requirements by subcontracting Tetra Tech ARD and therefore the subcontract should not be terminated. This determination is based on the following:

- USAID/Colombia used a competitive process to award on a full and open basis the Colombia Clean Energy Program (CCEP) Contract.

- As documented in the Memorandum of Negotiation for the base award, the Contracting Officer/Source Selection Authority determined that the offer submitted by Tetra Tech ES represented the best value to the Government, all factors considered.

- Tetra Tech ES, the prime offeror, openly and fully disclosed the company relationship with Tetra Tech ARD and its intent to subcontract it in both the technical and cost proposals (budget, letter of commitment and subcontracting plan). The Contracting Officer entered into discussions regarding this matter in the Request for Final Proposal Revision, and the offeror further clarified the distinction between Tetra Tech ES as a prime and Tetra Tech/ARD as a subcontractor in its final revised proposal.

- Tetra Tech ES submitted the required information to support consent to subcontract. Per FAR 44.202-2, the prime explained that Tetra Tech ARD was technically qualified to provide the services to be subcontracted and properly justified the price reasonableness determination.

- As part of its cost/business proposal, Tetra Tech ES submitted a detailed budget and budget narrative for all its proposed major subcontractors (one whose proposed cost exceeds US$1,000,000.00), including Tetra Tech ARD. Consistent with FAR 44.202-2 (b)(2), a careful and thorough consideration was given due to the ownership affiliations between the prime and subcontractor. Prices were found to be fair and reasonable despite this affiliation.

- The consent limitations in FAR Subpart 44.203 do not include a general prohibition or constraint against a prime contractor choosing an affiliated entity as a
subcontractor under a federal government contract.

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

Recommendation 11. We recommend that USAID’s Office of Acquisition and Assistance, if it determines that Tetra Tech ES Inc.’s bidding practice is fair, implement guidance for bidders on how to present costs of affiliated companies in contract proposals, and for its staff on how to review and evaluate such proposals.

In the evaluation of cost proposals, negotiators follow the guidance from OAA/Washington and the mandatory templates for cost analysis and cost realism analysis found in: https://pages.usaid.gov/node/1546. The guidance is based on the Federal Acquisition Regulation (FAR), Office of Management & Budget (OMB) Circulars, and ADS for use when conducting a cost/price analysis. The guidance contains a checklist that guides the Acquisition and Assistance (A&A) Specialist in analyzing cost proposals and contains a section specific to subcontracts with the following questions to orient the analysis:

- Is data provided showing the degree of competition and the basis for establishing the source and reasonableness of price for each subcontract priced on a competitive basis exceeding the threshold established at FAR 15.403-4? [see also FAR 15.408, Table 15-2, II(A)(1)]

- Did the proposal provide the basis for establishing the source and reasonableness of price for each subcontract priced on a noncompetitive basis exceeding the current threshold established at FAR 15.408 to include Price Analysis and Cost Analysis for subcontractors over the Truth in Negotiations Act (TINA) threshold of $700,000? (FAR 15.408, Table 15-2, Note 1) If the analyses are not included, provide a matrix showing item description, subcontractor, proposal receipt date, fact-finding completion date, Cost/Price Analysis completion date, negotiation completion date and date for contract award.

- Excessive Pass-through Charges- Identification of Subcontract Effort: If the Offeror intends to subcontract more than 70% of the total cost of work to be performed, does the proposal identify:
  a. The amount of the Offeror’s indirect costs and profit applicable to the work to be performed by the subcontractor(s)?
  b. A description of the added value provided by the Offeror as related to the work to be performed by the subcontractor(s)? [FAR 15.408(n)]

Additionally, USAID/Colombia’s solicitations contain language along the following lines in Section L - INSTRUCTIONS TO OFFERORS FOR THE PREPARATION OF THE COST/BUSINESS PROPOSAL:

- If two or more parties have formed a partnership or joint venture (see FAR
Subpart 9.6), for the purposes of submitting a proposal under this Solicitation and, if selected, would perform the contract as a single entity, they must submit, as an attachment to the Cost/Business Proposal, the Corporate Charter, By-Laws, or Joint Venture or Partnership Agreement. In addition, the teaming arrangements must be identified, company relationships must be fully disclosed, and respective responsibilities and method of work must be expressly stipulated. The joint venture or partnership agreement must include a full discussion of the relationship between the organizations, including identification of the organization, which organization will have accounting responsibility, how work will be allocated, and profit or fee, if any, shared. In addition, the principles to the joint venture or partnership agreement must agree to be jointly and severally liable for the acts or omissions of the other.

- The offeror and subcontractor(s) must submit sufficient evidence of responsibility for the Contracting Officer (CO) to make an affirmative determination of responsibility pursuant to the requirements of FAR Subsection 9.104-1. To be determined responsible, a prospective contractor must address FAR 9.104. If the offeror fails to submit sufficient evidence for the CO to make a determination of responsibility, then the CO may make a determination of non-responsibility and the offeror may be precluded from being awarded a contract. However, in the case of a small business offeror, the CO will comply with FAR 19.6.

- The offeror must address each of the elements in FAR 44.202-2 in order for all proposed subcontractors to be considered by the contracting officer for consent of subcontractors to be granted with the initial award.

- The Cost/Business Proposal must include a letter, on subcontractor letterhead, and signed by an authorized representative of each subcontractor, which specifically indicates the subcontractor’s agreement to be included in the offeror’s proposed teaming arrangement.

Overall, Requests for Proposals contain sufficient instructions for offerors to present their Cost/Business proposals and there is a wealth of guidance and tools for negotiators to use when reviewing and evaluating proposals.

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

Recommendation 12. We recommend that USAID/Colombia review Tetra Tech ES Inc.’s consultancy agreements to verify compliance with Colombian labor laws.

USAID has no expertise in local law and does not provide our contractors with legal advice on labor law or direct contractors on the process for entering into employment or consultancy contracts. It is the responsibility of the contractor to seek appropriate legal counsel when necessary to ensure compliance with local labor law. Tetra Tech contracted a local law firm with established relevant experience in labor law. The firm reviewed all previous employment actions and provided Tetra Tech with detailed memos and confirmation that Tetra Tech’s consultancy
agreements comply with Colombian labor laws.

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

Recommendation 13. We recommend that USAID/Colombia require implementers to provide the mission with the assessments they conducted and evaluate them to confirm that they are conducted in accordance with regulations.

As per ADS 303.3.9, USAID requires due diligence reviews to assess a potential grantee’s organizational, technical, and institutional capacity to manage USG funds. Tetra Tech developed a Pre-Award Responsibility Determination (PARD) based off of the USAID Non-US Organization Pre-Award Survey (NUPAS) and ADS 303 requirements. The PARD process is described in detail and is accompanied by a template in the USAID approved IFMM. The PARD evaluates an organization in the following categories: governance and organizational structure, legal status, human resources, working environment, budgeting, cash and banking, accounting systems, audits and financial reviews, procurement systems, asset systems, inventory systems, and travel policies, project management, and organizational sustainability. The PARD was conducted for all CCEP grantees, these studies were completed and are kept on file by the contractor.

In addition to the PARD, all Grant under Contract (GUC) applications are required to be reviewed by a Review and Evaluation Committee (REC) made up of at least 3 people to evaluate 1) Strategic Fit 2) Technical Focus 3) Organizational Capacity and Past Experience 4) Gender Considerations and 5) Cost Effectiveness. The procedures outlined and approved in the IF Manual are in compliance with ADS 303.3.6.2-3 and USAID has confirmed that the two cited grantees had a formal review and evaluation. This documentation is kept on file by the contractor.

In this contract, USAID/Colombia has included the mandatory clauses and Standard Provisions for subcontracting and has followed the procedures in FAR 44.2 in order to provide Consent to Subcontracts; however, the purpose of this requirement is to transfer the liability to the party doing the Responsibility Determination, not to perform this process for the contractor. Implementing this procedure would become a labor-intensive activity that would negate the purpose of using contractors and subcontractors at all, since in order to ascertain the appropriateness of the submitted documents the only way would be to perform the verification and responsibility determination ourselves.

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

Recommendation 14. We recommend that USAID/Colombia monitor and review expenses submitted by Tetra Tech ES Inc. to confirm that they are reasonable and allowable before paying them.

USAID/Colombia has monitored and reviewed expenses submitted as per standard provisions of
the contract and as stipulated in the Contracting Officer Representative (COR) designation letter.

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

Recommendation 15. We recommend that USAID/Colombia determine the allowability of $192,106 in ineligible questioned costs charged to the Clean Energy Program for subcontracts and consulting fees incurred without the competition required by Tetra Tech ES Inc.’s manuals, through either a financial review or an Agency-contracted audit, and recover from Tetra Tech ES Inc. the amount determined to be unallowable.

USAID/Colombia considers that there are no significant deviations from the approved Incentive Fund and Procurement manuals. All costs proposed/charged were reviewed at the time of vouchering to establish if they were to be excluded pursuant to statutory, Executive Order or other regulatory authority. Moreover, these costs were allocated for activities that pursued the objectives of the program, and followed any relevant statutory regulations.

The Mission requests removal of this recommendation, or closure upon issuance of the final report.

ADDITIONAL COMMENTS TO THE DRAFT REPORT

- USAID/Colombia requests that the report name be modified to a more neutral wording such as “Audit of the USAID/Colombia Clean Energy Program”.

- USAID/Colombia requests the section titles be modified to a more neutral wording as we do not believe these statements to be factually accurate.

- In the summary of results, please specify when the audit was conducted and that the program was still ongoing at the time of audit, thus not representing final programmatic results. Given this, it is premature to make the assertion that the program has not achieved intended results.