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Midterm Evaluation of the Kazakhstan Climate Change Mitigation Program

March 2017

This publication was produced at the request of the United States Agency for International Development. It was prepared independently by Social Impact, Inc based on the research conducted by the Evaluation Team consisting of: Frank Pool (Team Leader), Zharas Takenov (Technical Energy Efficiency Specialist), and Almaz Akhmetov (Technical GHG Specialist).

MIDTERM EVALUATION OF THE KAZAKHSTAN CLIMATE CHANGE MITIGATION PROGRAM:

A MIDTERM PROGRAM EVALUATION OF THE KAZAKHSTAN CLIMATE CHANGE MITIGATION PROGRAM

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The Evaluation Team
March 2017

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ACRONYMS

AEE	Association of Energy Engineers
BC	Business Community
CEA	Certified Energy Auditor
CEM	Certified Energy Manager
COP	Conference of Parties/Chief of Party
DCOP	Deputy Chief of Party
DOS	Department of State
DR	Desk Review
EBRD	European Bank for Reconstruction and Development
EDO	Economic Development Office
EE	Energy Efficiency
EC-LEDS	Enhancing Capacity for Low-Emission Development Strategies
EKSTU	East Kazakhstan State Technical University
EMMS	Energy Monitoring and Management System
ENG	English
ESCO	Energy Services Company
ET	Evaluation Team
ETS	Emissions Trading System
EU	European Union
FGD	Focus Group Discussion
FY	Fiscal Year
GCCI	Global Climate Change Initiative
GEF	Global Environmental Facility (of the UNFCCC)
GHG	Greenhouse Gas
GoKZ	Government of Kazakhstan
IAC	Industrial Assessment Center
IETA	International Emissions Trading Association
IR	Inception Report
KCCMP	Kazakhstan Climate Change Mitigation Program
KEA	Kazakhstan Electricity Association
KII	Key Informant Interview
LES	Law on Energy Savings
M&V	Monitoring and Verification
MoE	Ministry of Energy
MOU	Memorandum of Understanding
MRV	Monitoring, Reporting, and Verification
NGO	Non-governmental Organization
PMEP	Performance Monitoring and Management Plan
PPP	Public-Private Partnership
Q	Quarter

RUS	Russian
SI	Social Impact
SOW	Statement of Work
TO	Task Order
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USAID/CA	USAID/Central Asia Regional Mission
USG	United States Government
WP	Work Plan
ZD	Zhasyl Damu

ABSTRACT

This evaluation of the Kazakhstan Climate Change Mitigation Program (KCCMP) was conducted by Social Impact at the request of the USAID Mission in Central Asia. The KCCMP program had three key objectives: 1) improve the capacity of the GoKZ to implement and enforce GHG-reducing policies and measures, 2) build the capacity within the business community to comply with GHG-reducing policies and measures, and 3) improve the professional education of energy and climate change specialists in Kazakhstan. The evaluation covered five key research questions regarding the program design, capacity improvements within the GoKZ, capacity improvements within the business community, improvements to professional training, and adaptive and risk management. To assess these research questions, the evaluation reviewed key project documents and conducted a series of 36 key informant interviews. The analysis produced findings and conclusions that led to five key recommendations: 1) stop planning for new Energy Monitoring and Management System (EMMS) pilots and begin handing over existing systems to beneficiaries or relevant service companies, 2) continue support to the four Industrial Assessment Centers, 3) ETS support should continue to focus on the development of technical specifications and components, 4) update KCCMP's adaptive management practices, and 5) conduct baseline studies for any future programming.

EXECUTIVE SUMMARY

EVALUATION PURPOSE AND EVALUATION QUESTIONS

The primary audience for this independent external performance evaluation is the US Government (USG) through the U.S. Agency for International Development's (USAID) Mission in Central Asia. This evaluation focuses on providing findings and conclusions for the USG to help determine what KCCMP components and activities have worked well and why; which have not worked so well and why; and recommendations on how the program can be improved in its remaining implementation period through September 30, 2017 and in future USG activities in Kazakhstan and elsewhere.

The evaluation questions[1] are:

1. **The Program Design.** What was the situation analysis and barrier removal analysis that was explicitly (or implicitly) involved in the program design stage?
2. **GoKZ Improved Capacity.** Has the program assisted the Government of Kazakhstan (GoKZ) to implement and enforce GHG-reducing policies and actions?
3. **Business Community Improved Capacity.** Has the program improved the capacity of the business community to reduce GHG emissions?
4. **Improvements in Professional Training.** Has the program improved the training of GHG and energy management specialists?
5. **Risk Management and Adaptive Management.** To what extent has the program practiced risk identification and management and adaptive management during the program implementation to date? Is this an area where the program may need to be strengthened moving forward?

PROGRAM BACKGROUND

Kazakhstan is the world's largest landlocked country and the ninth largest country in the world, with an area of 2,724,900 km^2 (1,052,100 sq. mi.). Kazakhstan has the largest economy of Central Asia, generating 60% of the region's GDP, primarily through its oil and gas industry.[2] Kazakhstan's large industrial sector is based on its mineral resources. Coal provides most of the electricity and heat supply in the industrial east and north.

Kazakhstan is beset by competing goals and priorities as they relate to energy and greenhouse gas (GHG) emissions. On the one hand, it is driven by goals of economic growth within a context of significant economic challenges. Given their dominance in the Kazakhstan economy, economic growth plans often revolve around the oil and gas industries as well as other heavy industries, which are also large emitters of GHGs. On the other hand, Kazakhstan has committed itself to ambitious GHG emissions reduction and energy efficiency targets. It is in this context of competing priorities that Kazakhstan passed the Law on Energy Savings (LES), which took effect in 2012, and the Kazakhstan Emission Trading System (KAZ-ETS), which was enacted into law in 2011 but which has not yet taken effect.

[1] Updated (as detailed in the Inception Report) from the evaluation questions in the Statement of Work (SOW)

[2] Due to lower oil prices, and devaluations of the yuan and ruble, Kazakhstan devaluated the tenge by 45% in 2014–2015.

The overarching goal of the KCCMP project[3] is to support Kazakhstan as it pursues long-term, transformative development and accelerate sustainable economic growth, while slowing and eventually reversing the growth of GHG emissions. To support these goals, KCCMP aimed to support the GoKZ's efforts to implement and enforce the LES and the eventual ETS. The Kazakhstan Climate Change Mitigation Program (KCCMP) contract was signed on September 30, 2013, with Tetra Tech Inc. On September 30, 2015, the KCCMP end date was extended to September 30, 2017, and the updated budget (obligated amount from USAID) was increased to $8,475,637.63

TEAM COMPOSITION AND RESEARCH APPROACH

From October to December 2016 a three-member team from Social Impact, Inc., carried out the evaluation. The team consisted of a Team Leader, a Technical Energy Efficiency Specialist, and a Technical GHG Specialist. The evaluation used a mixed-methods approach involving 1) a desk review of available primary and secondary documents, 2) site visits involving structured key informant interviews (KIIs), 3) structured key informant interviews at the national level, and 4) quantitative and qualitative analysis of data reported by the program.

FINDINGS AND CONCLUSIONS

Project Design and Assumptions (Research Questions 1–1.5)

Research questions 1–1.5 focus on the extent to which KCCMP's original design was collaborative and clearly identified and assessed the project's key assumptions. It also examines whether the identified assumptions were, in fact, the most important assumptions.

The evaluation finds that the original project did identify and assess some key assumptions. Some, albeit limited, updates to the list of assumptions were also made during project implementation. However, the evaluation findings suggest that the project's risk ratings are likely overly optimistic given Kazakhstan's current political and economic climate. Though Kazakhstan has remained committed to its climate change goals, it also faces substantial pressures to improve its economy, which is deeply reliant on heavy industries that are energy-intensive and produce significant levels of GHGs. Thus, the evaluation concludes that the risks to KCCMP's ability to achieve its goals are more substantial than is currently acknowledged in its reporting.

In addition to concerns about the severity of the risks these assumptions pose to the project, the evaluation also drew attention to several specific assumptions/risks to which the project should be more attentive in the future. These specific assumptions are discussed in more detail in the main report.

Government Capacity Improvements (Research Questions 2–2.5)

Research questions 2–2.5 assess the extent to which and ways in which government capacity for mitigating climate change has evolved in response to the project.

Feedback regarding KCCMP trainings was very positive. Participants indicated that they found the trainings useful and that they have been able to use the training in their work, which suggests that there were some improvements regarding capacity. However, given the limited number of interviews, without a thorough baseline study, it is not possible to accurately determine the extent to which capacity has actually improved as a result of KCCMP implementation.

[3] KCCMP Statement of Work (SOW) C.2.1 Goals and Objectives

Additionally, regarding government staff training, a concern was noted on several occasions that the government staff turnover rate is quite high. This limits the project's ability to have an impact on government capacity, as those who are trained move out of their positions and new, untrained staff take their places. Even maintaining the current level of capacity in this type of environment would require repetitive trainings with new staff.

Business Community Capacity to Mitigate Climate Change (Research Questions 3–3.6)

Research questions 3–3.6 examine the project's effects on the business community and efforts to help businesses overcome obstacles to implementing climate change mitigation efforts.

Feedback regarding the provided trainings was positive. However, though there are capacity concerns within the business community for mitigating climate change, the largest constraint keeping the business community from taking action towards mitigating climate change (energy efficiency and greenhouse gas reductions) appear to be financial and economic concerns. Given the significance of the financial and economic constraints on businesses, particularly during Kazakhstan's current economic downturn, it is unlikely that an increase in capacity, even if it could be achieved and documented, would be sufficient to substantially alter businesses' behavior.

Based on data from KCCMP, the pilot projects are having an effect on heat use, which has been reduced by an average of 20% since the beginning of the project. However, interviews with the recipient organizations highlight that they are not largely concerned with heat savings, but rather overall energy cost savings (including both heat and other energy costs), for which the results have been more mixed. In many cases, secondary problems were experienced, including poorly planned installations, unevenly heated buildings, antiquated internal heating systems, and inefficient windows and wall insulation. In some cases, pilot recipients indicated needing to use space heaters to ensure sufficient heat in some areas of their buildings.

Though KCCMP financial models find that the EMMS systems should pay for themselves, concerns were raised by interviewees regarding the economic justifiability of the pilot projects, particularly for public entities who have less incentive for saving money. Without the financial support of KCCMP, there was concern that the EMMS systems would not be considered likely investments for public entities in the future.

Improvements to Training (Research Questions 4–4.6)

Research questions 4–4.6 assess the project's effect on the quality of training in Kazakhstan regarding climate change mitigation efforts.

As noted in other sections, reviews of KCCMP trainings were very high. KCCMP surveys also indicate that 100% of respondents report that they are actively using the training in their work. As of the 2016 PMEP reporting cycle, 380 (of a targeted 100) people were trained in the first year, while 217 (of a targeted 185) received training in the second year. Without a baseline study, however, it is not possible to accurately determine the extent to which capacity has actually improved.

Women have been strongly represented in the trainings, and a majority of respondents indicated that there are not substantial concerns about gender in Kazakhstan broadly or in the climate change fields specifically. However, given that women are already well represented within climate change fields, without a baseline study, it is difficult to assess whether their participation has equalized relative to men's as a result of KCCMP.

Adaptive Management and Sustainability (Research Questions 5–5.5)

Research questions 5–5.5 assess KCCMP's approach to risk management—in particular, its use of adaptive management and KCCMP's likely sustainability.

USAID has been very happy with KCCMP performance, and other stakeholders rate KCCMP's technical performance highly. However, the evaluation team (ET) found some weakness in processes.

As outlined under the section on assumptions, though KCCMP has included some reporting on risks and assumptions, the evaluation team found that some key assumptions and risks have been missing and that the risk assessments and mitigation plans do not appear to take into account the strong potential these risks have to limit the impact of KCCMP interventions.

In terms of sustainability, though there is not a written sustainability plan for each project components, the project team has aimed to incorporate sustainability into the design and implementation of each component. However, sustainability of benefits will ultimately depend on the extent to which the benefits themselves are realized. Though evidence exists that KCCMP is making progress on its shorter-term objectives, as laid out in the PMEP, there is less evidence regarding the project's effect on longer-term objectives such as energy efficiency gains and GHG reductions.

KEY RECOMMENDATIONS

1. It is recommended that KCCMP stop planning for new EMMS pilots, as their sustainability is currently in doubt. It is recommended that KCCMP begin the process of handing over the existing systems to the beneficiaries or to relevant service companies, as the hand-over process is expected to take considerable time and is expected to be complex, based on the experience of UNDP and other donors. It is recommended that KCCMP consult with UNDP and other relevant donors about their experiences with these types of transfers.
2. It is recommended that support for the four Industrial Assessment Centers (IACs) be continued, as the use of regional technical universities is a very promising way to provide ongoing energy management and GHG mitigation training in Kazakhstan after the end of KCCMP activities on September 30, 2017. It is recommended that the IAC's scope be expanded from just providing training on energy audits to becoming Clean Energy Centers. It is recommended that the existing four IACs, and any other interested state technological universities (if feasible, given the time and budget remaining), focus on undergraduate, post-graduate and professional energy management and GHG mitigation training covering all sectors (not just the industrial sector). It is recommended that KCCMP give priority to utilizing its remaining time and funds to the development of the new Clean Energy Centers, along with purchasing and transferring the necessary technical equipment needed.
3. It is recommended that KCCMP's ETS support continue to focus on the development of a benchmarking approach that is accepted by the business community and the GoKZ for future free GHG allocations, a best practice GHG monitoring and verification (M&V) system, UNFCCC-compatible GHG inventory data gathering and reporting, and other relevant ETS technical matters. It is also recommended that KCCMP enhance efforts to engage the business community and government in resolving key outstanding ETS issues. It is recommended that international experts/facilitators with ETS experience from the full range of different countries with existing or planned ETSs be used, and not only from the US and Europe.
4. It is recommended that USAID update its adaptive management practices to include better documentation of risks, risk assessments, and risk mitigation strategies. It is also recommended that these assessments consider the impact of the additional assumptions highlighted in this evaluation. In addition to risk management documentation, it is also recommended that USAID improve budget documentation so as to better inform future planning.
5. In the future, should another project similar to KCCMP be introduced, it is recommended that a baseline study be conducted to assess the current status of expected outcomes. There are multiple options for how to conduct such a study—some of which have larger cost implications than others. USAID should assess the cost-benefit of the different options to determine which

option would best suit the need. Regardless of the option chosen, baseline information will both improve the program's accountability and support improved programming.

I. EVALUATION PURPOSE AND EVALUATION QUESTIONS

EVALUATION PURPOSE

This independent, external performance evaluation reviews the Kazakhstan Climate Change Mitigation Program (KCCMP). KCCMP was launched on January 23, 2014, runs to September 30, 2017, and is being implemented by Tetra Tech Inc. This evaluation focuses on providing findings and conclusions for the USG to help determine what KCCMP components and activities have worked well and why, which have not worked so well and why, and to provide recommendations on how the program can be improved in its remaining implementation period. The evaluation links the program design, assumptions, planning, implementation, risk management, and adaptive management of the KCCMP components and activities to the outputs and outcomes from the program to date. The evaluation also provides recommendations on how the KCCMP program's effectiveness and long-term impact can be improved in its remaining implementation and to inform the planning of the proposed new follow-on project scheduled for FY2018. The primary audience for the evaluation is the U.S. Agency for International Development's (USAID) Mission in Central Asia.

EVALUATION QUESTIONS

As agreed upon between Social Impact and USAID in the Inception Report (IR), the evaluation questions are:

1. **The Program Design.** In particular, what was the situation analysis and barrier removal analysis that was explicitly (or implicitly) involved in the program design stage?
2. **GoKZ Improved Capacity.** Has the program assisted the GoKZ to implement and enforce GHG-reducing policies and actions?
3. **Business Community Improved Capacity.** Has the program improved the capacity of the business community to reduce GHG emissions?
4. **Improvements in Professional Training.** Has the program improved the training of GHG and energy management specialists?
5. **Risk Management and Adaptive Management.** To what extent has the program practiced risk identification and management and adaptive management during the program implementation to date? Is this an area where the program may need to be strengthened moving forward?

II. PROGRAM BACKGROUND

Kazakhstan is beset by competing goals and priorities as they relate to energy and greenhouse gas (GHG) emissions. On the one hand, it is driven by goals of economic growth within a context of significant economic challenges. On the other hand, Kazakhstan has committed itself to ambitious GHG and energy efficiency targets.

The Kazakhstan economy is heavily focused on extractive and heavy industries and is therefore intrinsically very energy-intensive. As with other ex-Soviet republics, Kazakhstan's greenhouse gas (GHG) emissions fell sharply after independence in 1991. Following a recovery period, though, GHG emissions began rising again, to a large degree led by the development of the oil and gas industry. Today, the oil and gas industries are the largest contributors to the Kazakhstan economy but are also the largest source of GHG emissions. This focus on heavy industry and the oil and gas industries does not appear to be shifting, as Kazakhstan also has major development goals of increasing industrial as well as energy production. These goals are supported politically by a plentiful supply of low-cost coal in eastern Kazakhstan where most of its heavy industry is based. It also exists at a time in Kazakhstan where there is a substantial need for economic growth. Kazakhstan experienced a major economic downturn following the major drop in world oil prices in 2014. This drop in oil prices led to a currency devaluation of 45% in August 2015, which, in turn, led to a sharp increase in the inflation rate, all of which has put substantial strain on businesses. In this light, the economic development plan receives substantial political support. Should the plans to increase industrial and energy production be successful, Kazakhstan's GHG emissions would substantially increase.

On the other hand, the Government of Kazakhstan (GoKZ) also has a stated strategic objective to be an energy-efficient economy,[4] with ambitious low emissions objectives[5] as well as an ambitious strategy to reduce energy intensity by 25% by 2020.[6] To this end, in 2012, the Law on Energy Savings and Energy Efficiency (LES) was passed. Kazakhstan has also been developing a GHG Emissions Trading System (ETS) since 2012. The KAZ-ETS was intended to have a cap on GHG emissions for major emitters, but this has been postponed until 2018, and further delays are possible, given opposition to its implementation.[7,8]

It is within this context that the KCCMP project was conceived. Given the rapidly evolving policy environment in Kazakhstan, KCCMP was intended to embrace the principles of adaptive management and work to update programmatic management tools, such as the full integrated Work Plan and Performance Monitoring and Evaluation Plan (PMEP), at strategic intervals.

The overarching goal of the KCCMP project[9] is to support Kazakhstan as it pursues long-term, transformative development and accelerate sustainable economic growth while slowing and eventually reversing the growth of GHG emissions. The three KCCMP objectives (tasks) were as follows:

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[4] World Bank Group: "Kazakhstan: Adjusting to Lower Oil Prices; Challenging Times Ahead" (Fall 2015)

[5] USAID/CENTRAL ASIA. RFTOP No. SOL-176-16-000008. (15.6.2016)

[6] Zakon.kz: Asset Issekeshev: "Global demand for primary energy will grow by a third by 2030" (13.04.2016)

[7] Gomez A., Dopazo C. and Fueyo N., 2014. "The causes of the high energy intensity of the Kazakh economy: A characterization of its energy system." *Energy,* 71, pp. 556-568.

[8] Akhmetov A. 2015. "Effect of Kazakh ETS on Industrial Energy Intensities." Seminar in Risk Engineering. University of Tsukuba

[9] KCCMP Statement of Work (SOW) C.2.1 Goals and Objectives

1. Improve the capacity of the GoKZ to implement and enforce GHG-reducing policies and measures
2. Build the capacity within the business community to comply with GHG-reducing policies and measures
3. Improve the professional education of energy and climate change specialists in Kazakhstan

To achieve these goals, KCCMP aimed to assist Kazakhstan in implementing its existing LES, and the upcoming ETS, by providing trainings on energy audits, energy managers, energy reporting under the LES, and the GHG obligation monitoring of emission obligations under the ETS. The original, obligated budget for the KCCMP project (as per the signed Contract No. AID-OAA-I-13-00019 under Order No. AID-176-TO-13-00003 between USAID and Tetra Tech signed on September 30, 2013) with an estimated completion date of September 29, 2016. However, on September 1, 2015, the KCCMP completion date was extended to September 30, 2017, and the obligated amount from USAID was increased to $8,475,637.63. The project description language in the modified contract signed on September 01, 2015 was unchanged from the original contract.

There were two key assumptions underlying the design of the KCCMP program:[10]

1. First, that the laws in place were sufficiently well designed to drive GHG emissions and energy use reductions if effectively implemented.
2. Second, the necessary high-level political commitment would remain for the implementation of the laws, despite anticipated political opposition.

[10] As detailed in the SOW Results Framework

III. EVALUATION METHODS AND LIMITATIONS

EVALUATION METHODS

The evaluation used a mixed-methods approach to collect data for the evaluation. There were two phases of data collection: 1) a desk review phase and 2) a fieldwork phase involving 36 structured key informant interviews (KIIs) undertaken in person in Kazakhstan. The desk review was conducted in October and the field work in November 2016. During the fieldwork phase, additional relevant documents were also obtained and analyzed. Annexes II and III outline the evaluation methods and data sources used in the evaluation.

In terms of location, the evaluation fieldwork took place in Kazakhstan in Almaty, Astana, Pavlodar, Karaganda, and Ust-Kamenogorsk, as these were the specific locations for KCCMP operations, management pilot projects, Industrial Assessment Centers, and relevant USAID offices. Annex IV provides additional detail on the sites and individuals visited and interviewed.

The list of respondents for the KIIs was based on input from USAID, KCCMP, the evaluation desk review phase, and referrals from key respondents during the fieldwork phase. The following KII groups were interviewed:

- Pilot project recipients/hosts
- Pilot project equipment and technical support suppliers
- Industrial Assessment Center managers
- The relevant manager at the Ministry of Energy (ME)
- Industrial Assessment Center staff
- The relevant manager at the Emissions Trading System Operator (Zhasyl Damu, or ZD)
- Universities, including:
    - Karaganda State Technical University
    - Almaty University of Power Engineering and Telecommunications
    - Innovative Eurasian University
    - East Kazakhstan State Technical University
- USAID staff
- KCCMP staff, including senior, program, and technical staff
- UNDP
- Relevant key business associations
- Related government support organizations

During the team's four weeks in Kazakhstan, the evaluation team conducted an in-brief and an out-brief with the USAID/CA Mission in Almaty, met with the USAID Country Director in Astana, and provided a preliminary findings presentation at USAID in Astana near the end of the fieldwork phase. Preliminary findings, conclusions, and recommendations were presented to USAID in the preliminary results and out-briefs presentations.

The evaluation team examined evidence from all data sources using a combination of pre-/post-, descriptive, and qualitative analysis. The findings from these analyses were used to triangulate findings in response to each evaluation question, allowing the evaluation team to develop and substantiate robust conclusions based on findings. Quantitative project performance monitoring data was used to support findings when possible.

EVALUATION LIMITATIONS

The Inception Report for this evaluation identified six potential limitations for the evaluation. After implementation of the evaluation, four of the identified limitations remain, while two were mitigated to the extent that they did not pose a substantial threat to the evaluation. The four remaining limitations to this evaluation are the short length of the evaluation period, the lack of quantitative baseline, challenges in linking higher-level outcomes with immediate outputs, and response bias on the part of respondents. The two limitations that were successfully mitigated were concerns about the team's ability to assess gender-specific issues as well as the ability to fully ascertain the historical political and economic context in which climate change mitigation efforts are being made.

The KCCMP evaluation was conducted over a period of three months, which placed some restriction on the methods as well as the breadth of the evaluation. In the end, the team was able to conduct 36 interviews during the fieldwork stage covering a wide variety of stakeholder groups and reviewed numerous documents during the desk review. However, there was insufficient time available to systematically interview the recipients of KCCMP training, so secondary sources of information, including an assessment done of the training by KCCMP, were also used to assess this aspect of the program. Every effort was made to assess every component of the KCCMP program to the fullest extent possible.

No record of a baseline study was found either with KCCMP or USAID. A baseline study would have provided information regarding the key areas and extent of climate change mitigation capacity weakness. Such a study could take many forms, and some possibilities as well as additional details are included under research question 5. Though the evaluation team made every effort to assess capacity changes via interviews and secondary data, without a thorough baseline and follow-up assessment of capacity across a wider range of participants than was possible through the interviews, it is not possible to precisely measure the extent to which capacity was increased as a result of the project.

KCCMP focused on building capacities around the LES, ETS, and GHG emissions in general. However, the longer-term goal of these trainings was to have an impact on energy efficiency and GHG emissions at the national level. Substantial time is needed and many steps in the theory of change are required to make this transition. Many other factors are also influencing GHG emissions in Kazakhstan, including changes in industrial and energy production as well as other efforts by the government and other donors around climate change. As a result, trying to measure change and establish causation is particularly challenging. Though the team has made every effort to provide plausible and credible findings, the available data and lack of a comparison group do not allow for direct attribution of long-term results but rather focus on the contribution that KCCMP has likely had on these outcomes.

Response bias is a challenge inherent in all evaluations. To mitigate this challenge, the evaluation team worked with USAID and other key stakeholders to identify respondents with varying programmatic experiences, both positive and negative. The team also provided clear communication to all respondents regarding the purpose of the evaluation, highlighting the team's role as external evaluators and the utility of honest responses. Every effort was made to include diverse perspectives and to encourage honest feedback from all respondents.

Two potential limitations that were identified during the evaluation design did not ultimately pose as significant of a threat to the evaluation as had been initially anticipated. In terms of gender perspectives, there was a concern that the team would not be able to obtain sufficient information about the role of women and the unique challenges faced by women in the KCCMP context. However, in the end, the team found that both men and women were open to speaking about the role of women in the energy efficiency and GHG domains. Similarly, the team had been concerned that it would be challenging to understand the political context of support and opposition to the LES and ETS but found respondents

readily able and willing to talk about the competing priorities and the reasons behind some of the opposition that has been encountered.

IV. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

The discussion of findings and conclusions is broken up by research question. Given the integrated and interlocking nature of the evaluation conclusions, the key recommendations follow the specific discussions on each research question. The findings and conclusions regarding research questions 1 and 1.1 focus on pre-implementation design work. The discussion of research questions 1.2-1.4 include a mix of findings about the initial design phase as well as the implementation phase.

PROJECT DESIGN AND ASSUMPTIONS (RESEARCH QUESTIONS 1–1.4)

For questions regarding project design and assumptions, this evaluation examined all aspects of design- both design aspects that were led by USAID and occurred before the project was contracted to TetraTech, as well as those aspects of design that occurred after the project began implementation.

Question 1: To what extent were the original design assumptions, limitations, and assessment of risks explicitly stated and did they hold true during the project? [Program Design]

Findings

The evaluation team received two design documents that described the assumptions of the program design. One, an initial design document by USAID, described several specific assumptions for each of the potential project activities. The second document by USAID, the SOW for the implementation contract, had reduced and combined these previously detailed assumptions into two key assumptions to the success of the KCCMP project:

1. That the laws in place are sufficiently well designed to drive GHG emissions and energy use reductions if effectively implemented, and
2. That high-level political commitment will remain for implementation

The earlier document did not provide an assessment of whether the assumptions would hold, but in the later document, both assumptions were rated favorably, with the indication being that the assumptions would not pose substantial threats to the success of the KCCMP project. However, the evaluation found evidence that these assumptions did not hold true as originally anticipated.

Regarding the first assumption, interviews indicate several weaknesses both to the design of the laws and their implementation. As stated, the first assumption is quite broad and encompasses several specific, underlying assumptions that were raised during the interviews, namely that there are sufficient incentives for businesses and public entities to adopt climate change mitigation measures.

Regarding the assumption that there are sufficient incentives for businesses and government entities to want to invest in energy efficiency and GHG reduction measures, ten interviewees noted that the low cost of energy in Kazakhstan is a significant challenge to this assumption. It is commonly understood in the energy efficiency domain that users are more likely to adopt energy-efficient measures when they feel the full costs of the energy they are consuming. Many energy efficiency measures are incremental improvements, reducing energy use by a few percentage points. When energy costs are low, the benefits from a reduction of a few percentage points may not be substantially felt. However, when costs are higher, the benefit is more acutely felt and the incentive to adopt the practices is greater.[11] According to the interviews, in Kazakhstan, given the very low energy prices, there is little natural incentive to adopt

[11] International Institute for Sustainable Development (2016). "The Opportunity Costs of Subsidies." Available online: http://www.iisd.org/gsi/effects-subsidies

incremental improvements. Indeed, an increase in both heat and electricity tariffs was a base assumption for the conclusions of a cost-benefit analysis of Kazakhstan's Green Growth Strategy by DIW-econ[12].

Part of the LES is designed to address the incentives for investment by introducing fines for those who do not abide by the regulations. However, three interviewees, representing another donor, the business community, and a university, suggest that regulation enforcement is still weak. Many businesses are reportedly able to flout the rules without negative consequences. When there are consequences, many businesses find it financially more beneficial to just pay the fines rather than incur the substantial costs necessary to comply with the regulations.

In addition to the lack of incentives due to the low cost of energy, public entities face a secondary set of incentives separate from the business community. For these entities, the state pays their bills, thereby further reducing the incentive to save money. At least one respondent reported having been reprimanded by their superiors for under-spending their budgets after they experienced substantial cost savings.

Interviews also suggest substantial challenges to the second assumption on political commitment to implementing and enforcing the LES and ETS. As outlined in the background section above, Kazakhstan is currently facing two separate and opposing pressures. It has committed to efforts to increase energy efficiency and reduce GHGs. However, given the current economic downturn, the government also faces substantial pressure to improve the economy. Given that the economy is heavily focused on energy (primarily oil and coal) and heavy industries that are energy-intensive, these core goals of environmental protections and improving the Kazakhstan economy are directly at odds.

Added to these challenges is the fact that much of the industrial base uses equipment and technologies that are now outdated and energy-inefficient. In many cases, replacement would be the preferable option for businesses to rehabilitation or other incremental improvements. However, it would take substantial financial investments to accomplish this task. Three interviews indicate that the financing for such upgrades is not available at rates or terms that would make such large, immediate investments economically feasible for businesses. The burden would be too great.

As reflected in the interviews, these factors are weighing heavily into opposition to the LES and, even more so, the ETS. For the ETS, political opposition to its implementation has led to substantial delays to its adoption. The ETS is currently slated to enter into force in 2018. However, it is unclear whether even this date will be maintained. Interviews with some stakeholders suggest a possibility that it will be even further delayed, though public statements by government officials indicate that the current date will be maintained. The opposition encountered to the ETS appears to be coming from all affected sectors, though the coal industry has been particularly opposed.

Further complicating the possibility for political support of the LES and ETS is the fact that the GoKZ was reorganized after the KCCMP project was designed. One of KCCMP's primary proponents, and their primary interlocutor, was the Ministry of Environmental Protection. However, since then, the government ministries were reshuffled, and environmental matters now fall under the Ministry of Energy. Given the above competing priorities within the Kazakhstan economy and the reliance on the energy sector, KCCMP has not enjoyed the same level of support from the Ministry of Energy that it had previously received from the Ministry of Environmental Protection. Despite these challenges, there are still some champions for climate change mitigation within the government, including from the Department of Climate Change and from the Prime Minister, who chairs the Green Economy Council.

[12] DIW econ (2014). Implementation of a Green Growth Strategy in Kazakstan.

Conclusions

Given the above findings, the evaluation team concludes that the initial project documents did explicitly state the assumptions that had been identified at that point and did provide an assessment of those assumptions. Though initial project documents assessed these two assumptions positively, the evaluation team concludes that they have not held as true as was initially anticipated, posing more significant threats to the success of the project than initially anticipated.

Identifying the key assumptions (and their corresponding risks) to the success of a project is a key component of the design process and one that continues throughout project implementation. When assumptions are not adequately identified and assessed, significant risks arise to project success. However, early and honest identification enables implementation to adjust for these risks and enables the project to increase its likelihood of achieving long-term objectives.

Sub-question 1.1: Did the project's management formally identify and then validate the assumptions made in the design phase? What impact have the key assumptions had on the design and implementation phases?

Findings

As noted above, documentation provided to the evaluation team by USAID does identify the assumptions made during the design phase and makes an assessment of their likely impact. However, interviewees note that the assumptions made have been having a larger than anticipated impact on anticipated outcomes.

The misalignment of incentives for both businesses and public entities is likely to limit the extent to which the current laws are able to have their anticipated effect on the adoption of energy efficiency and GHG reduction measures. The reduction in political will to support KCCMP and the government's LES and ETS efforts has already delayed ETS implementation, with further delays possible.

Conclusions

The initial assumptions that were identified during design were clearly identified at the time, with an identified assessment of their impacts. However, the evaluation team concludes that the anticipated impacts were underestimated and that the risks associated with each of the assumptions have already started imposing greater limitations on the potential impacts of the project than has been acknowledged in any of the program's documentation.

Sub-question 1.2: To what extent did the project consult and use the skills, experience, and knowledge of relevant representatives of donor organizations, business, government, NGOs, and academia during the design of project activities? To what extent was this knowledge gained useful (positively or negatively) for the project?

Findings

According to five out of six interviews that discussed collaboration both during USAID's initial design as well as after implementation began, respondents indicated that consultations with a variety of stakeholders, including governmental actors, other donors, and the business community, took place. However, four of these actors indicate that they do not feel as though the designers or implementers of KCCMP have been listening to their input and making corresponding modifications to the project.

In one case, an interviewee reports having tried to share their past experiences conducting similar types of projects. Though they felt they did their best to identify pitfalls that they had experienced and ways in which KCCMP could avoid these same challenges, they feel that changes were not made and are concerned that KCCMP is repeating some of the same, past mistakes as similar projects. In particular, they had shared their organization's past experiences in implementing an Energy Services Company (ESCO) pilot and their recommendation to pursue public-private partnership (PPP) alternatives. They did not see their advice and past experiences taken into account, and they had observed KCCMP facing

many of the same challenges they had faced. Regarding this particular anecdote, Tetra Tech project staff indicate that every attempt was made to incorporate and learn from the experiences of other organizations, including input from a two-day roundtable on ESCO/PPP models. The final approach taken was the result of input from many sources and thus may have differed from the suggestions of any one organization.

From the government, there have been requests for both more consultation and, in some cases, an improvement of relations. Some respondents noted that there had been a degradation in relations between themselves and KCCMP over the last year or so—something that they would like to change. Project staff share the desire to improve relations. The new leadership for the KazETS, which arrived in early 2017, offers one opportunity for improvement.

From the business sector, respondents were concerned about KCCMP's unwillingness to really listen to their concerns about new regulations. Though they expressed willingness to compromise and work together, they expressed frustration about what they characterized as an uncompromising stance by KCCMP.

Conclusions

Given the above findings, the evaluation team concludes that the project design team did consult with a wide variety of stakeholders and relevant actors in the sector. However, the knowledge gained through these consultations could have been better used to inform project design.

Sub-question 1.3. How has the management model proposed by the project influenced the project's implementation and outcomes?

Findings

Similar to what was found regarding research question 1.2, interviewees reported that there was collaboration and discussion between stakeholders and KCCMP about the project, though there were some concerns that stakeholder input was not being fully integrated into the project. These stakeholders were concerned that not fully taking into account their past experiences would put the project at risk of repeating mistakes that other projects have made in the past.

A key project management document for all USAID projects is the Project Monitoring and Evaluation Plan (PMEP). The initial version of the KCCMP PMEP did not include indicator targets, which likely would have made it difficult to manage the project for results. Later versions of the PMEP, including the 2016 version, did include these targets. The evaluation team noted, however, that the performance indicators used in the PMEP are largely short-term in nature, covering such items as number of people trained, number of laws passed, etc. While these are good indicators of the extent to which the project is doing what it said it was going to do, such short-term indicators do not address the next steps in the theory of change to examine the extent to which the project is achieving its longer-term outcomes and objectives. For instance, we know how many people are being trained through the project, but we know very little about the extent to which those who were trained are using their training or the extent to which the training increased their knowledge and skills or the extent to which those changes have resulted in adoption of energy efficiency or GHG reduction measures.

Regular meetings are held between KCCMP and USAID to discuss project progress. The evaluation team was provided a sampling of recent meeting notes for review, which documented recent and upcoming events as well as ways in which the project was being adapted to feedback and requests for additional assistance.

Conclusions

Key strengths of the KCCMP project management model include the frequency of meetings and updates between KCCMP and USAID as well as the effort to consult key stakeholders regarding project design and implementation. The PMEP, though useful for tracking and reporting on short-term outputs and outcomes, is limited in its ability to inform decision making around longer-term objectives.

Sub-question 1.4. Were the risks identified in the Task Order (TO) and KCCMP and USAID reviews on project implementation the most critical risks?

Findings

In the 2016 update to the PMEP, the original two assumptions described under research question 1 were updated as follows:

1. GoKZ remains committed to low-emission development strategies as reflected in the memorandum of understanding (MOU) signed between GoKZ and USAID in 2013,
2. GoKZ continues its policy to sharply reduce energy intensity of both the public and the private sectors, and
3. GoKZ continues to actively cooperate with the KCCMP in reaching its national climate mitigation and energy intensity objectives.

Thus, it appears that the key assumption related to the design and implementation of the climate change mitigation laws was no longer included, and the assumption related to political commitment was expanded to better specify particular components of that commitment, in the three updated assumptions. According to the 2016 PMEP, KCCMP assessed these assumptions positively, indicating they believed the assumptions to continue to hold (though, as described under research question 1, there are significant risks associated with the ongoing political support and commitment to climate change efforts).

As also described under research questions 1 and 1.1, the formerly identified risk regarding design and implementation has continued to pose a risk to the project. Thus, it was surprising to see that this risk had dropped off KCCMP's list of key assumptions in the 2016 PMEP, particularly in light of the ongoing challenges faced.

In addition to the assumptions and risks related directly to the GoKZ's legislation and implementation, the evaluation also revealed additional key assumptions regarding the design of KCCMP itself, which had not been previously identified by KCCMP. These assumptions include the following: that government staff trained through the project would continue to serve in their governmental roles after being trained and that the services offered to the business community through KCCMP were addressing the most critical needs. These two topics are explored in more depth under research questions 4.2 and 3.3, respectively. However, the assumptions and their associated risks highlight the fact that the key assumptions identified by the project relate only to external factors and not the project itself.

Delays to project implementation have largely been linked with those on the part of the government, such as the postponement in ETS implementation, or the length of time it takes to get new policies and regulations approved and processed. Outside of this, however, the evaluation team did not hear of any substantial delays to project implementation.

Conclusions

The evaluation team concludes that, though some key assumptions were clearly identified, other key assumptions were not identified and/or had lost some of their specificity that had initially been included in the Project Authorization Memorandum. This initial document included significant detail about the specific assumptions for each of the project components. However, over time, the assumptions lost

much of their specificity by the beginning of the project. In the case of political support, later iterations of the assumption list expanded and better specified the initial, broad assumption. However, the assumption that the laws passed and implemented by the GoKZ would be sufficient to change behaviors was dropped entirely, despite evidence of its continuing risk to project achievements. Additionally, assumptions regarding the KCCMP project itself were not identified but should have been.

Clear and precise identification of key assumptions help the implementation team identify critical risks to the achievement of project objectives. When, or if, it is determined that an assumption is not holding and/or that the risks posed by the assumptions are being realized, this provides the project team with the opportunity to make adjustments. For instance, if the team were to note the resistance to climate change mitigation within the business community and the intergovernmental priority conflicts that pose hurdles to the political support for the ETS, the project team could push for changes that might help mitigate these concerns and improve the political and business community support for project objectives. (research questions 3–3.6 explore these issues more thoroughly.)

GOVERNMENT CAPACITY IMPROVEMENTS (RESEARCH QUESTIONS 2–2.5)

Question 2: To what extent has the GoKZ's capacity to implement and enforce greenhouse gas (GHG)-reducing policies and actions improved as a result of KCCMP's support? [GoKZ Improved Capacity]

Findings

Across all entities, nine out of nine interviewees that discussed training quality had very positive feedback. They generally felt it was helpful and useful to their work. In particular, government actors reported that they found the trainings to be good networking platforms and were useful for knowledge sharing.

As mentioned in the section on assumptions, however, there is high turnover among government staff. Thus, those who receive training do not necessarily stay in their positions to be able to put that training to use in support of government policies. This substantially limits the impact that training can have on the overall level of capacity within the government to create and implement laws, policies, and regulations regarding climate change.

The evaluation team heard from three interviewees that actual enforcement of the new climate change policies and regulations was limited. Many businesses were reportedly able to skirt the new regulations without incurring fines, while those who were fined found the fines to be minor and unlikely to induce the businesses to make the necessary improvements to comply with the law. Given the tools and data available to the evaluation team, however, it is not possible to discern the extent to which this weak enforcement is due to low levels of capacity vs. other competing priorities within the government, pressure from business groups, insufficient funding for enforcement, or other possible explanations.

It should also be noted that the evaluation team could not obtain a baseline study of the pre-project levels of capacity—either within the government or among other target groups. Thus, though anecdotal responses about the usefulness of the training were obtained, it is not possible for the evaluation team to accurately measure the extent to which any changes in capacity were achieved.

Conclusions

Given the available data, the evaluation finds that, among those who were trained, KCCMP did transfer capacity regarding energy efficiency and GHG reduction measures. However, in response to the broader question of whether the capacity of the government has been increased, the evaluation team concludes that the challenges of high staff turnover are significant and are likely to prevent KCCMP from having a substantive impact on overall government capacity to create and implement laws, policies, and regulations regarding climate change.

Sub-question 2.1: What new laws or statutes have been passed by the Legislature?

Findings

According to two interviews and monitoring data, KCCMP appears to be making satisfactory progress towards goals for supporting the government in producing the necessary laws and statutes to support the GoKZ's commitments for energy efficiency and GHG reduction. According to the 2016 PMEP, KCCMP has supported six of a targeted three new/amended laws, policies, agreements, or regulations. Currently underway is the ratification of the Paris agreement, and KCCMP is supporting the ETS and Ecological Code legislations.

Conclusions

Based on the evidence collected, the evaluation team concludes that satisfactory progress is being made towards passing new laws and statutes regarding energy efficiency and GHG emissions. The team does not find that the ability to pass timely and pertinent legislation is posing any threat to the achievement of longer-term outcomes.

Sub-question 2.2: To what extent have new GHG mitigation–related laws conflicted with other strategic, economic, and industrial plans of the Ministries of Energy, Investment and Development, and National Economy?

Findings

Though the GoKZ appears to be making satisfactory progress in developing and implementing new laws and supporting policies and regulations, as outlined in evaluation question 1, there are clear, competing priorities within the GoKZ. These conflicting priorities were raised on several occasions by interviewees.

The conflicts noted include:

- Conflicting priorities between economic development (which is highly reliant on energy-intensive industries) and climate change mitigation goals, which also reflect themselves in different Ministries publishing contradictory goals and targets. For instance, while the Ministry of Energy has advocated reducing the consumption and production of coal, the Ministry of National Economy advocates increasing it.
- Achievement targets that vary between different laws, policies, and regulations, which makes implementation, enforcement, and compliance a challenge.

These conflicts are likely arising from the same paradoxical situation within Kazakhstan outlined in the background section. Kazakhstan has recently experienced an economic downturn, and thus there is significant political pressure to increase economic activity. The easiest way to quickly grow the economy is to focus on growing those sectors that are already strongest. However, given the Kazakhstan economy's concentration on heavy industry and fossil fuels, which are major producers of GHGs, growing these industries is going to also increase GHG emissions. Thus, Kazakhstan's objectives of reducing GHG emissions are in direct conflict with the economic development pressures that are particularly acute at the moment.

Conclusions

Different ministries within the government have very conflicting priorities resulting from the different political pressures they face and are unlikely to diminish. So long as heavy industry and the production of fossil fuels are the cornerstones of the economy, these competing pressures are likely to continue. Thus, any efforts at GHG mitigation will need to take these competing priorities into account and work towards compromises that will not overly burden the Kazakhstan economy.

Sub-question 2.3: What policy or administrative guidelines have been issued by regulatory agencies?

Findings

According to interviews and monitoring data, KCCMP appears to be making satisfactory progress towards goals for supporting the government in producing the policies and guidelines necessary to implement its commitments to energy efficiency and GHG reduction. According to the 2016 PMEP, KCCMP has supported six of a targeted three new/amended laws, policies, agreements, or regulations. KCCMP reports that they are currently working on a batch of secondary regulations that will be necessary to achieve longer-term objectives. Progress has also been made in the creation of tools and guidelines to support the implementation of the regulations. The most recent PMEP indicates that KCCMP is meeting its targets, with 19 of a targeted 14 tools having been created. Despite the progress made in the passage and finalization of guidelines and regulations and the creation of tools, however, enforcement by the GoKZ remains weak, as was highlighted under research question 2.

Conclusions

The evaluation team concludes that satisfactory progress towards the production and implementation of administrative guidelines and regulations is being made.

Sub-question 2.4: To what extent have government agencies reduced their energy consumption and costs?

Findings

One of the KCCMP goals is to reduce energy use in general and for the GoKZ specifically. Unfortunately, however, the evaluation team could not obtain any data in this regard—either in terms of baseline or current data on actual energy consumption by the government. It is therefore not possible for the evaluation team to adequately assess the extent to which government energy use as a whole has changed over the course of KCCMP's implementation period.

In terms of the pilot projects, there were differing results regarding heat consumption and energy costs. The primary goal of the pilot projects was to reduce heat consumption. Preliminary data from KCCMP indicates that the majority of projects have been able to reduce their heat consumption. This is likely to have cost savings for the local governments.

However, when the individual project recipients were asked about their own cost savings, the results were mixed. Pilot recipients found that only a few of their projects were experiencing an overall reduction in heating costs. Of the eight visited pilot projects, three said they did not yet have enough information to assess whether their costs had changed. Two indicated that their costs had been reduced, while three indicated that the costs were not reduced. Three of the pilot project recipients reported having to use space heaters to warm rooms that were not adequately being heated after the EMMS installation, posing a significant challenge to the possibility of reducing energy use at the user level (even if the central distributor of heat is realizing savings). Thus, it is possible that, though central heat consumption is going down, the cost savings associated with that reduction is being offset by other energy uses (such as the space heaters). Though the pilot projects offer insight into the outcomes from one component of the project and do represent a subsection of governmental entities, it is unlikely that the experiences of these pilot projects would be representative of the experiences of government entities more broadly, given their involvement in the project.

The evaluation team would also like to raise USAID's attention to a growing segment of the energy efficiency literature, which suggests that caution be taken with using energy consumption and costs as an outcome measure. This literature suggests that cost-effective energy efficiency gains (where the

implementer saves money by implementing changes) are often accompanied by an actual increase in energy use (a "rebound" effect), rather than a net decrease in energy use.[13] The rebound effect suggests that the savings in energy costs from the energy efficiency measures are reinvested into other productive uses of energy— such as adding additional lighting, additional production capacity, or extending operating hours. This reinvestment, added to general expansions of energy-consuming technologies underlie the finding within the literature that, on net, energy use tends to increase over time, regardless of any energy efficiency gains. Users are doing more with less, but still using more on the whole. Thus, net changes in energy consumption should be used carefully as a potential outcome for energy efficiency projects.

This is not to say that improved energy efficiency is not a positive improvement or that it does not help the environment; quite the contrary. However, it suggests caution when using overall energy consumption and costs in trying to assess the effectiveness of energy efficiency interventions, as these measures may fail to detect an effect when one exists. Though finding an adequate alternative indicator is an ongoing debate, many organizations have moved towards efforts to measure "avoided demand," which attempt to parse out the part of consumers' demand for energy that is now reduced because of energy efficiency, regardless of any new consumption. As a brief example, take a project that distributed 1,000 LED light bulbs to homeowners. If the project were to use the net change in energy usage by these households as their indicator of success, they are likely to find that consumption has gone up rather than down because the households decided to leave the lights on longer, add additional lights to their home, or buy new appliances or devices that also use electricity. Instead, the organization might choose to measure the "avoided demand" created by the 1,000 light bulbs they distributed. Assuming each LED bulb was replacing an incandescent bulb, both with 60 W equivalency, and assuming an average use per day of three hours, they could report that their project resulted in 154.5 kWhs of reduced demand per day (or 56,392 kWhs per year), as compared with the pre-project status. Though several assumptions must be made in these types of calculations, many organizations find avoided demand measures to better reflect project benefits than measures of overall consumption or costs.

Conclusions

Unfortunately, the evaluation team had very limited information with which to determine changes in energy use by the government. Sources related to the pilot projects provided some insight, but it is unlikely that these organizations are representative of the broader government.

The focus of this particular research question is on the project's effect on overall energy use. However, findings from the broader literature suggest that, even if data were available on energy use by government agencies, it may not provide the best estimation of the project's benefits, given the tendency for consumption to increase despite any efficiency gains. Instead, other metrics or indicators might provide a better estimation of the projects benefits, such as measures of avoided demand or measures that look at the productivity or end use associated with a unit of energy (lumens per kWh, for example, or energy intensity within the economy).

[13] Shellenberger & Nordhaus (2014). "Why Energy Efficiency Can Increase Energy Consumption in Poor Countries." http://thebreakthrough.org/index.php/voices/michael-shellenberger-and-ted-nordhaus/why

Sub-question 2.5: What are the key factors that have been contributing to and/or obstructing the GoKZ's implementation and enforcement of energy efficiency (EE) / greenhouse gas (GHG) policies and actions to date? How can these obstacles be overcome?

Findings

Interviews indicate that LES enforcement is currently limited. Likewise, the setbacks and delays in the implementation of the ETS, currently set for 2018, but which interviews indicate may be further delayed, suggest substantial challenges in advancing the ETS. To explain these challenges, data collected shed light on several key obstacles that are limiting the GoKZ's ability to effectively implement and enforce its energy efficiency and GHG polices, in order of importance:

- Conflicts between different political priorities and policies
- Resistance from the business community
- Government staff turnover

As previously noted, the inherent conflict between Kazakhstan's energy efficiency and GHG reduction goals and its need for economic growth pose a substantial challenge to implementing and enforcing the laws that have been passed. Implementing the complex and sometimes controversial laws such as the LES and ETS takes a substantial amount of effort and coordination. If the political will is not there and/or there are competing priorities around key objectives, these conflicts pose significant obstacles to implementation and enforcement. The second biggest factor obstructing advancement on climate change in Kazakhstan is resistance from the business community, particularly around the ETS. The ETS and LES only apply to portions of the Kazakhstan economy, primarily to the biggest companies, which are also the largest producers of GHG emissions and are largely energy-inefficient. For these heavy and extractive industries, significant growth also means an increase in their emissions and an increase in their energy consumption, which would pose even greater challenges for their ability to comply with the LES and the planned ETS while also maintaining their profit margins.

The ability to comply with the LES and, eventually, the ETS is a very costly one—especially for industries that rely on equipment that is decades old. The funding that would be required to upgrade all of Kazakhstan's industries is enormous. As previously stated, there are significant concerns about the availability of capital to implement these changes. Similarly, two of the three business associations interviewed noted fears that the costs of complying with the new regulations, and particularly the ETS, would be too great for them to bear. Interviewees noted that this is particularly the case for the coal industry (which is a significant portion of the Kazakhstan economy), where the prices the industry receives for its commodities are substantially below the actual costs of production; therefore, the industry lacks the funding necessary to invest in substantial infrastructure upgrades.

In addition to voicing their concerns over the various energy efficiency and ETS policies, business community representatives also voiced their frustration over poor communication and collaboration with the government in the formation and definition of these policies. Though there are formal feedback periods for all new regulations, two of the business community actors felt that the feedback they provided went ignored. In this way, not only did the business community express concern about collaboration with KCCMP itself, but it was also concerned about the level of collaboration and feedback on the part of the government.

The third main challenge to successful implementation and enforcement of the GoKZ's energy efficiency and GHG efforts is high staff turnover within the key ministries and agencies. This topic is discussed in more depth under research question 4.2; however, it was noted by interviewees as a challenge to implementation.

Conclusions

Currently, there are more challenges and obstacles to implementing and enforcing the LES and ETS than there are factors contributing to its progress. The biggest factors are the conflicting political priorities, resistance from the business community, and high staff turnover within key government ministries and agencies.

BUSINESS COMMUNITY CAPACITY TO MITIGATE CLIMATE CHANGE (RESEARCH QUESTIONS 3–3.6)

Question 3: To what extent has the capacity of the business community to take emission-reducing actions improved as the result of KCCMP's support? [Business Community Improved Capacity]

Findings

Overall, feedback regarding KCCMP trainings has been largely positive, and respondents have found the trainings useful. Specifically, nine respondents noted the positive effect of the trainings in which either they or their staff had participated. No respondents had negative assessments of the trainings provided under KCCMP, though some did note that, despite the trainings, other obstacles to implementing energy efficiency and GHG mitigation efforts were still preventing substantial action by businesses. In particular, the business community noted that the trainings were useful for teaching about best practices around the world, and that they brought together large numbers of actors so that they could work together. Unfortunately, from the business community representatives that the evaluation team was able to speak with, the team was unable to assess the extent to which women-owned businesses, specifically, had benefited from the trainings.

Despite the positive feedback from participants, there is recognition by actors that the energy efficiency and GHG objectives sought will not be immediate. Even with increased capacity, it will take time for businesses to learn about the new laws, determine how best to comply with them, and then to start seeking funding for and implementing major energy efficiency and/or GHG mitigation efforts.

The evaluation was able to ask people about their perceptions of the effectiveness of the trainings and about how they believed the trainings had changed their capacity for taking emission-reducing actions; however, because there was no baseline data collected regarding individual levels of capacity, it is not possible for the evaluation team to assess how much that capacity was changed.

Conclusions

The evaluation team concludes that, though it is not possible to quantify the extent to which business community capacity was affected, given the very positive feedback received via the interviews, KCCMP is likely to have had a positive impact on the business community's capacity to comply with energy efficiency and GHG-reducing measures.

Sub-question 3.1: How has the implementation of KCCMP affected GHG emissions?

Findings

Two respondents that directly referenced GHG emissions indicated that emissions had gone down in recent years, though they directly linked this decrease with reduced economic activity rather than an improvement in energy efficiency or cleaner processes. They anticipate that, with economic recovery, these emissions will again increase.

These interview responses are further supported by Kazakhstan national statistics, which show that, as of 2012, air-polluting emissions were down to 2.3 million tons from a high of 2.6 million tons in 2008.[14] Given the weak LES enforcement and delays in ETS implementation, however, it is unlikely that substantial improvements in GHG emissions will have been realized as a result of KCCMP. Also, as noted by one respondent, realizing large-scale gains in energy efficiency or GHG emissions reductions is a very long-term goal. The effect of any program will likely take years to manifest. Thus, it would be unlikely to see substantial change in GHG emissions after only two years of project implementation.

Unfortunately, the business representatives that the evaluation team spoke with were not able to help the team assess the extent to which there has been an increase in the awareness of how to reduce emissions, which would be the first step towards encouraging businesses to actually implement GHG reduction measures.

Conclusions

Greenhouse gas emissions have declined over the period 2008–2012, a finding that is supported by interviews. However, the evaluation team finds that this decrease is unlikely to be due to KCCMP implementation. Rather, it is more likely due to overall economic fluctuations. Moving from increased capacity to the implementation of energy efficiency and GHG-reducing measures is a long-term goal, not one that would likely be able to be measured in the middle of project implementation. It is more likely that any gains would only be realized after the end of the project.

Sub-question 3.2: To what extent did the project help establish systems for high-quality data management and corporate-level monitoring, reporting, and verification (MRV) to meet the reporting burdens required by both the LES and/or ETS?

Findings

The evaluation team met with three different business association representatives. When asked about their understanding of corporate-level MRV and the reporting systems that would be required to comply with the LES and ETS, none of the representatives were able to respond to the question. They were unfamiliar with the requirements and any work that KCCMP had been doing in this regard. The organizations that the ET spoke with were not the same organizations that KCCMP has been working directly with on MRV matters, however.

In terms of the transparency and ease of accrediting GHG verifiers, Certified Energy Managers, and Energy Auditors, who will be providing services to the business community to meet their reporting requirements, the accrediting rules and processes were still under development at the time of data collection. Thus, an evaluation of their transparency was not possible. In terms of the ease of current processes, three of the four universities spoken with reported issues in obtaining the necessary equipment required for accreditation and performing high-quality work.

Conclusions

It is likely that, had the evaluation team been able to speak with individuals who had directly participated in the MRV and reporting training sessions, more information would have been gleaned regarding the usefulness of the trainings. However, assuming that MRV standards will need to be known and/or implemented more broadly, the lack of familiarity with MRV and reporting standards by business association representatives suggests that more work could be done to elevate the importance of MRV among the broader business community.

[14] Agency on Statistics of the Republic of Kazakhstan (2013). Statistical Yearbook Kazakhstan in 2012. Astana, Kazakhstan.

It is too early to determine how transparent and easy the final accreditation process will be. Currently, at least some users are reporting that the requirements for equipment are difficult to satisfy. High standards are not necessarily bad, as the accreditation process is designed to ensure that only qualified and capable entities are accredited. However, attention will need to be paid to ensure that any requirements are not overly burdensome and that the benefit of all requirements justifies the costs.

Sub-question 3.3: How did the project help the business community (BC) to overcome the key challenges faced in adopting GHG mitigation and energy-saving measures?

Findings

The goal of KCCMP vis-à-vis the business community was to improve their capacity to comply with governmental regulations, with the theory of change assuming, as indicated in research question 1, that an increase in capacity would lead to an increase in businesses that are adopting energy efficiency and GHG reduction measures. However, interviews with the three business association groups indicate that their level of capacity for compliance is not the primary factor that is preventing them from implementing these types of measures. Rather, two additional constraints are inhibiting substantial investments in energy efficiency or GHG reduction: financial and economic constraints and availability of good auditing services.

The primary constraint is a financial and economic one. Without access to adequate financing on terms and timetables that would allow the businesses to remain profitable, any changes to the level of capacity would not be sufficient to induce substantial investments to mitigate climate change and comply with GoKZ policies. As outlined under research question 2.5, which discussed business community opposition as being one of the primarily obstacles to the implementation of the GoKZ's energy efficiency and GHG policies, the business community's concerns, and thereby opposition, revolves around ensuring economic growth (and the growth of their businesses) and accessing adequate financing. The biggest economic sectors in Kazakhstan are very energy-intensive and are large emitters of GHGs. They also rely on outdated equipment that is particularly energy-inefficient. However, in many cases, significant improvements would require equipment replacement rather than smaller, more incremental upgrades, which would require substantial investment.

There is a general acknowledgement by the representatives with whom the team spoke that improvements need to be made. However, respondents would prefer more gradual requirements because this approach would allow them to incur upgrade costs over a longer time period. They are concerned that requiring immediate changes would lead to huge costs all at once. They indicate that the limited availability of long-term financing that would similarly allow them to spread the costs, particularly those that would be incurred under the ETS, would cause them to become unprofitable and could potentially put them out of business.

As it currently stands, the representatives with whom the team spoke are most concerned about the cost implications of the ETS, which is reflected in the level of opposition that the ETS has received. As previously noted, the LES is not being strongly enforced, and, when it has been enforced, businesses have often found it easier and cheaper to pay the fines than to make the investments necessary to come into compliance.

Though the business community has strong reservations about the affordability of necessary energy efficiency and GHG reducing measures, the design of the KCCMP project was, at least in part, based on a study done by DIW-econ that conducted a cost-benefit analysis for the Kazakhstan economy of

Kazakhstan's Green Growth Strategy. The study, finalized in early 2014, found that, for most sectors, the costs were outweighed by long-term efficiency gains and cost savings[15].

Despite the overall positive finding, however, some current realities pose a challenge to the report's positive findings. First, the report authors note that "while most of the proposed modernisation measures require investments in the utility sector, incentives for doing so are so far not sufficient." Though the overall economy was expected to realize economic gains due to efficiency improvements, the utility sector, specifically, was anticipated to realize significant losses due to the amount of investment that would be required and the inability to recoup these costs. In addition, the mining sector, was only expected to receive limited positive economic impacts from efficiency measures (less than 2.5% gain), despite also being a sector that would require substantial investments. The report recommends that losses, and the accompanying disincentive for these industries to invest in upgrades, be addressed by creating a co-funding mechanism. Though some efforts have been made by donors to support funding of energy efficiency and GHG mitigating measures, the available funding is far less than would be required (DIW-econ report estimates that 3-4 billion USD is required per year until 2050). This plays into the concern voiced by the evaluation's respondents about the lack of affordable funding.

Second, the report's calculations of the costs and benefits to the Kazakhstan economy were based on certain assumptions about the costs of key commodities like oil and coal- particularly given the heavy role these commodities play in the economy. However, since early 2014, substantial decreases in the world prices for these commodities have likely changed these calculations. As of early 2014 when the report was written, the IEA had projected that oil prices in 2017 would be over $90/barrel. The actual price now is under $50/barrel. Price drops have also occurred for coal and gas, which are other key commodities in Kazakhstan. These price drops are likely to affect businesses differently, depending on their relation to the commodities. For those that use it as an input, the price change is a boon. For those trying to sell it or transform it, such as the mining sector, it is a significant hurdle to profitability. DIW-econ's report estimated that the mining sector would realize a small, but positive gain. Given the drop in commodity prices, it is possible that this positive gain from efficiency and GHG mitigation efforts no longer exists for many in this sector. This new reality of low commodity prices and the disincentive it plays for many businesses to invest in climate change mitigation efforts was often cited by interviewees.

Though of lesser importance than the financial constraint, another issue raised by business community respondents relates to the quality of energy audits performed in Kazakhstan. Though businesses noted that this is partly a capacity issue, the larger factor, again, was financial. To conduct a high-quality energy audit requires a well-trained team and sophisticated equipment. Both of these cost money. However, according to two interviews, energy auditors, in an attempt to win a particular bid, may artificially lower their offer price. When they ultimately win the contract, they then find that they are not able to perform a high-quality service, using well-qualified staff and all the necessary equipment for the price that they had quoted. Thus, they cut corners and use less-qualified staff and insufficient equipment. This frustrates the business community as they have paid for an energy audit that is not accurate or helpful.

Given the above constraints, it was not surprising that the evaluation team did not hear any significant reports from the business community representatives regarding declarations or statements about business community plans to increase energy efficiency or reduce GHG emissions. Nor did the interviews suggest that the business community had become self-sufficient in designing and implementing mitigation measures, which was an additional question the evaluation team had hoped to explore.

[15] DIW econ (2014). Implementation of a Green Growth Strategy in Kazakstan.

Conclusions

KCCMP intended to increase the capacity of the business community for compliance with GoKZ policies as a means of increasing their adoption of energy efficiency and GHG-reducing measures. However, this theory of change assumes that capacity for compliance is the primary constraint to their adoption of mitigating measures. However, based on the interviews conducted, this assumption does not hold true. Thus, in response to the question of how KCCMP has helped the business community overcome the key obstacles to adopting mitigation measures, the evaluation team finds that KCCMP has not been doing enough to affect the primary constraint, which is about finances and economics. Thus, KCCMP's focus on capacity is limiting its longer-term impacts. Even if KCCMP could successfully raise business capacity for compliance, on its own and without also addressing the financial constraint, it would be insufficient to induce substantial change.

This is particularly the case given the continued financing and commodity price challenges noted by businesses. These new realities and challenges are not evidence that progress cannot be made towards energy efficiency improvements and GHG reductions- certainly, there are some measures that will pay for themselves via cost-savings. But that is not true of all necessary projects in all sectors- some projects necessary for compliance would either result in a net loss or such a small gain that the gain would not be sufficient to induce the investment. Rather, these new realities do suggest that the original, high aspirations may not be feasible without additional subsidies or co-financing options. Currently, though businesses recognize the need for improved efficiency and reducing GHG emissions, they do not believe these primary constraints are being adequately addressed.

This is not to say that capacity around climate change compliance is not a weakness within the business community. As previously noted under research question 3.2, none of the business community respondents were able to meaningfully discuss the LES and ETS reporting requirements related to the business community. Thus, capacity is also still a constraint. Rather, the findings indicate that relieving the capacity constraint is a necessary but insufficient condition for inducing substantial change on the part of businesses.

As long as the primary constraints to compliance and the adoption of energy efficiency measures and GHG reductions continue, resistance from the business community is likely to remain strong, particularly for the ETS. For the LES, as long as enforcement remains weak, the opposition is likely to remain more subdued. Should enforcement become more rigid and the cost implications for businesses increase, however, it is possible that more opposition would be encountered.

Though it was of lesser importance, the problems noted by the business association representatives about the quality of energy audits is similarly only partially due to a lack of capacity. KCCMP is focusing on raising the technical capacity of energy auditors and other professionals within Kazakhstan. However, the problem is also a financial one within the bidding process. Just improving individual capacity may not be sufficient to change the larger practice of underbidding auditing contracts.

Sub-question 3.4: How successful was the process of identification and preparation of pipelines of technically feasible and commercially viable energy and resource efficiency projects?

Findings

The evaluation team met with eight pilot projects as well as with organizations installing and maintaining the pilot equipment and local government entities that were supporting the pilots. As indicated by USAID, the intent of the pilot programs was to improve the efficiency of public heating systems. In many buildings, there was previously no way to turn off the heat provided by the central system, which led to significant over-heating in some buildings, where people had to open the windows in the middle of winter to regulate the temperature. The pilot EMMS systems provided a temperature gauge that was located outside the building, which then signaled to the system how much heat needed to be sent to the

building, thereby intending to reduce the overall use of heat that is distributed by the central system. According to data provided by KCCMP, eight out of nine projects that were cited in the data had experienced both heat usage savings and heat cost savings.[16]

When the representatives from the organizations that received the pilot EMMS systems were interviewed, however, respondents all focused on the extent to which they were experiencing an overall savings in energy costs (which would include both heating costs as well as other energy costs like electricity). This overall financial outcome is the one that is likely to matter the most to the receiving entities. If they are able to save money, it makes financial sense for them to continue maintaining the system. If they are not saving any money, there is less of an incentive.

Thus, when asked about the benefits of the pilot project, all respondents mentioned the possibility of overall energy cost savings. The interviews indicated mixed findings regarding overall energy costs. In three cases, the pilot recipients indicated they did not yet have sufficient information to determine the effect of the project. Of the remaining five, two reported realizing reduced energy costs, while the other three reported that their costs had not gone down.

Utility data collected by KCCMP and obtained by the evaluation team after the end of the fieldwork in Kazakhstan indicates that three pilot projects saw their electricity costs go up over the course of project implementation (note, however, that though three entities reported no savings via the interviews, these three did not overlap perfectly with the three entities experiencing electricity increases in the utility data). According to the KCCMP data, a few of the entities experienced significant fluctuations (including significant decreases in usage). However, both KCCMP and the evaluation team acknowledge that these fluctuations aren't only influenced by the EMMS systems, but also by other changes undertaken by the entities in terms of electrical equipment. Thus, without an estimate of the counterfactual and/or full knowledge of all other major changes in electrical equipment, it is difficult to parse out the precise effect of the EMMS pilots on total energy costs.

According to the interviews, though the pilots have largely resulted in heat savings distributed by the central system, the reduction in heat did come with some secondary effects for the pilot buildings, including other energy efficiency problems (older windows, poor insulation, unevenly heated buildings) as well as some problems with the specific installations. These problems often led to inadequately or unevenly heated buildings. When the buildings were being over-heated, the efficiency problems did not pose as big an issue for the organizations. For instance, people in rooms that were losing a lot of heat due to inefficient windows or wall insulation were just less likely to need to open their windows to cool off in the winter. With the amount of heat being reduced through the new systems, these other efficiency problems were highlighted and causing more significant issues for the organizations. To mitigate areas that were insufficiently heated with the EMMS system, three of the recipients specifically noted having to use space heaters in some areas of their buildings to maintain an acceptable level of heat, a reality that likely had a strong influence on their ability to realize energy efficiency gains.

To assess both long-term sustainability as well as to assess whether entities might pursue the future installation of similar EMMS systems without project funding, the overall cost-effectiveness of the EMMS systems must be assessed- comparing the likely energy cost savings to the overall costs. Though KCCMP financial models find that the systems would pay for themselves within 7 years, the interviews revealed more skepticism. There were concerns from some of the involved organizations that, without the financial support of KCCMP, the installations would not be economically justifiable given the extent and likelihood of cost savings. In this way, they were concerned that the pilot projects were not pilots in

[16] KCCMP (2017). "Adjusted heat energy saving on EMMS project on January 1, 2017ff," transmitted via email from USAID.

the sense that they could be examples for the Akimats or other organizations to implement their own EMMS systems without donor support. The evaluation team did not have access to KCCMP's financial analyses in order to assess the core assumptions. Thus, further analysis by USAID would be required in order to determine where the discrepancy between the model and the evaluation respondents arises.

In addition to the financial concerns, three of the entities noted concerns about the final transfers of the systems—both in terms of who would be responsible for ongoing operations and maintenance as well as about how the equipment would be transferred onto the asset lists of the receiving institution. This was of particular concern given that the recipients for the KCCMP pilots are public entities, who don't necessarily have the same incentives to reduce costs that a private entity would (as noted previously in the report, some entities actually had a disincentive to underspend their allotted budgets). These institutional concerns contributed to the issues expressed around the long-term sustainability of the pilots. Regarding ongoing operations and maintenance after the end of KCCMP, though some recipient organizations appeared to be clear on what was required of them and who they should work with, other organizations did not seem to have a clear sense of direction or instruction regarding these procedures. Regarding the formal equipment transfer, there was reported resistance by the organizations to formally accept the equipment onto their asset registers, as this would introduce added costs and paperwork for the organization.

Conclusions

Though benefits have been realized in terms of heat reductions, the pilot system users reported secondary effects that could reduce the utility and benefits of the projects, with only three of the pilots visited reporting that they had realized an overall financial benefit from participation. The energy data collected by KCCMP found more positive results, though the electricity data was likely influenced by external factors. The recipient organizations also noted a number of negative secondary effects that have required additional investments to remedy. Given conflicting evidence from different sources, it is unclear whether the savings experienced in reduced heating will economically justify the significant financial investment that would be required to expand the EMMS deployment in the future using the KCCMP model. The sustainability concerns regarding the transfer of ownership of the equipment adds to some of the concerns expressed regarding the financial sustainability of the EMMS systems. Thus, though the KCCMP EMMS pilots have resulted in documented heat savings, it is unclear whether the project has achieved the goal of creating a pipeline of feasible and economically justifiable efficiency projects that could be implemented in the future, without project support.

Sub-question 3.5: To what extent did the Market Simulation Courses help BC associations improve their Climate Action Plans?

Findings

As with the other forms of training, interviewees responded positively about the KCCMP technical support. However, they also noted that, due to the delay of the ETS to at least 2018, the incentive for businesses to focus on the creation or implementation of Climate Action Plans was limited. This finding is supported by data in the Year 4 PMEP, which shows that only two of the targeted four Climate Action Plans have been initiated.

Conclusions

The ability of KCCMP to support businesses in creating Climate Action Plans was undermined by the delay in the ETS. Until the ETS is implemented and its specific requirements are understood, this lack of incentive is likely to continue.

Sub-question 3.6: How sustainable is the Auditor and Verification Forum [the former Climate Corps] for conducting future annual events to provide training or retraining to verifiers as warranted by new requirements?

Findings

The KCCMP project has been implementing two separate forums: the Verifier Forum and the Climate Leadership Forum (which is the former "Climate Corps"). The Verifier Forum brings GHG verifiers and government representatives together to share updates on accreditation requirements and rule updates and provides GHG verifiers with the opportunity to provide feedback to the government. The Climate Leadership Forum began as a training series and evolved into a discussion forum that includes community representatives, NGOs, and government representatives.

When asked about the forums, only one respondent was aware of them (the implementer of the Verifier Forum). All other respondents were unaware of the forums. In the case of the Verifier Forum, it's possible that, given the more limited group of participants, that the evaluation team was just unable to reach the right potential respondents. In the case of the Climate Leadership Forum, however, the lack of familiarity suggests that the forum's visibility is still limited among the business community.

In terms of sustainability, the Verifier Forum is being organized and coordinated directly with support from KCCMP. The evaluation team was not informed of any certain plans for funding or conducting the events after the end of the KCCMP project. The Climate Leadership Forum, on the other hand has begun a process for transitioning forum management. According to reports from KCCMP staff, members have begun cost-sharing to ensure ongoing funding for the forum, and several NGOs have expressed interest in taking over management of the forum.

Conclusions

Neither forum was well known by respondents to the evaluation. In the case of the Verifiers Forum, this may have been linked with who the ET was able to speak with. As for the Climate Leadership Forum, however, it suggests that more could be done to encourage participation and make the forum more visible- particularly in light of requests the ET received for an increase in discussion and communication between KCCMP implementers, the government, and business representatives.

In terms of sustainability, a plan for ensuring the sustainability of the Climate Leadership Forum is currently in place and appears to be gaining traction. For the Verifiers Forum, however, sustainability is likely to be limited unless alternative funding streams to support the events can be located.

IMPROVEMENTS TO TRAINING (RESEARCH QUESTIONS 4–4.6)

Question 4: What, if any, improvements have occurred in Professional Training of GHG and energy management specialists in Kazakhstan provided by the project? [Improvements in Professional Training]

Findings

Overall, feedback regarding the trainings was very positive. Respondents found the trainings helpful, useful, and relevant to their work. According to KCCMP's feedback survey, 100% of respondents indicated using the training they received in their present work. There do appear to be capacity constraints within Kazakhstan in regards to energy auditors and other energy professionals. However, interviewees report that progress is being made towards mitigating this particular constraint. Specifically, energy professionals noted appreciation for the improved knowledge about project funding options and international experiences mitigating climate change. The trainings were reportedly very practical and applicable to people's work.

Despite the positive feedback, no baseline data could be obtained regarding the actual level of capacity before or after the trainings. Thus, it is not possible to accurately measure the extent to which capacity

has actually increased as a result of KCCMP training efforts, even though, based on the interviews, it appears that there has been a positive effect.

Conclusions

Given the significant, positive feedback regarding the trainings, the evaluation team concludes that the project did have a positive effect on capacity, even if it is not possible to estimate the extent of that effect.

Sub-question 4.1: To what extent was the design of the professional trainings provided by the project appropriate to the Kazakh country context?

Findings

Overall, interviewees indicated that they found the trainings to be well adapted to the Kazakhstan context. As supported by the positive reviews of the trainings, interviewees found the material relevant to their different fields and applicable to the Kazakhstan context.

Part of the training's applicability to the local context is also represented in whether participants have been able to apply their new skills through their work and whether there is demand for their services. Three interviewees suggest that this demand does exist and that trainees can obtain jobs doing relevant work. However, as one respondent noted, it is likely that the demand for energy professionals' services will really start to grow only after the ETS is implemented and/or the LES becomes more steadily enforced. As already noted, enforcement of the LES has been weak thus far, and many companies prefer not to comply with the regulations. If this enforcement were to increase, it would likely cause an increase in the demand for energy auditing services. Similarly, once the ETS enters into force, businesses will need more support from energy professionals to audit and verify their energy consumption and their GHG emissions. Thus, even though demand for professional services is currently solid, the added demand expected from full LES and ETS implementation and enforcement may not be realized for some time.

Conclusions

The evaluation team concludes that the trainings were well adapted to the local context and that they met the needs of the training participants.

Sub-question 4.2: How well were the project trainings targeted for the different audiences of government officials, business community, and academia?

Findings

As with the other reviews of the KCCMP trainings, interviewees reported that the trainings were well targeted for their needs. These reviews were consistent across the different types of trainings and audiences.

Conclusions

The evaluation team concludes that the trainings were well targeted for the different audiences.

Sub-question 4.3: What are the mechanisms to adapt trainings to new requirements and to ensure that trainings and training results will continue beyond the project completion date?

Findings

In terms of mechanisms for adapting the trainings to changing circumstances, decisions were largely made between USAID and KCCMP. Weekly meeting notes document that changes are being made, though they didn't (at least in the sampling received by the evaluation team) describe what specific

changes were being incorporated. Thus, though evidence is available that changes were being made, the evaluation team was unable to assess the specifics of the changes that were made.

Conclusions

It appears that some modifications to the trainings have occurred as the result of conversations between USAID and the KCCMP project team. The fact that most interviewees found the trainings very relevant and helpful is supportive of the idea that adaptations were made to ensure the trainings met trainees' needs.

Sub-question 4.4: How did GHG trainings address energy management issues and vice versa?

Findings

KCCMP-supported trainings received very positive reviews. However, given that the trainings sought to teach international ISO standards, the trainings tended to focus on the specific aspects of the particular ISO. Thus, they were somewhat compartmentalized, with little crossover between separate but related topics, which is a question that USAID was interested in hearing more about. Only one respondent felt able to respond to this particular question, noting that trainees in one topic area were not able to learn about topics in another area unless they signed up for another course. In terms of trainees' ability to learn the material that they came to learn, however, the impact of this compartmentalization was limited. Program staff confirmed that, though each training was distinct, participants were alerted via a mailing list about additional training opportunities on other topics.

Conclusions

There is some compartmentalization of trainings under KCCMP, which could limit a broader understanding of climate change and climate change mitigation efforts. It could be useful, for instance, for auditors to understand the role being played by GHG verifiers, even if only at a high level. However, the lack of that knowledge is not a major obstacle for their ability to conduct energy audits. Thus, the overall impact of this compartmentalization is likely limited.

Sub-question 4.5: To what extent have the training workshops improved female involvement in GHG and EE activities?

Findings

Although female participation was not a core focus of the project, KCCMP has made efforts to reach out to women with its training services. According to the figures reported in the PMEP, outlined in **Table I**, they are successfully reaching a substantial number of women. Forty-four percent of training participants to date have been women. Likewise, five of the seven interviewees who discussed gender indicated that there were not substantial gender concerns in Kazakhstan as compared to neighboring countries. Though it appears that there are more male auditors, there are more women in environmental fields, according to one respondent. Though most respondents (including female respondents) did not have any substantial concerns about KCCMP in regards to gender considerations, there were two respondents who thought more could be done to address the specific needs of women and women's ability to participate in energy fields.

In addition to assessing the role of women in KCCMP in general, the research questions for this evaluation also specifically asked to what extent women's involvement in climate change matters was increased as a result of KCCMP interventions. Despite the largely positive feedback received regarding the role women have played in training and in climate change mitigation fields in general, it is not clear that KCCMP, in particular, has contributed to increasing that participation. Again, without hard baseline data, it is impossible to estimate the extent to which women have increased their participation in

KCCMP or whether their relatively high rate of participation is just a reflection of their pre-existing level of representation in the climate change fields.

Conclusions

Women have had strong levels of participation in all of the KCCMP trainings. However, without knowing more precisely how many women are participating in the field more broadly, it is hard to determine the extent to which the current level of participation represents an increase.

Sub-question 4.6: What was the output of the various trainings?

Findings

KCCMP has met or exceeded most of its training goals under the PMEP in terms of people trained. According to the 2016 PMEP, 776 people, including 427 men and 349 women (of a targeted 612 people total) have been trained to date.

Table 1. Number of new people (men and women) receiving USG-supported training (KCCMP PMEP, 2016)

Planned	100	185	215	112	612
Actual	**380** (196 M, 184 F)	**217** (125 M, 92 F)	**179** (106 M, 73 F)	–	**776** (427 M, 349 F)

Outside of the reported numbers of trainees, however, the evaluation team was unable to collect any information regarding publications or new energy training materials produced (outside those that were directly created through the project). Thus, though the team anticipated exploring these more detailed questions, no meaningful information could be obtained.

Conclusions

To date, the project has been able to meet its anticipated training targets at the output level.

ADAPTIVE MANAGEMENT AND SUSTAINABILITY (RESEARCH QUESTIONS 5–5.5)

Question 5: To what extent did the KCCMP program and USAID identify and manage risks to the original design assumptions during its implantation phase to date? How was the operational performance and sustainability of the project?[17] [Risk Management and Sustainability]

Findings

The KCCMP scope of work clearly suggests that, given the complex and readily changing policy environment, the project was to embrace the principles of adaptive management. Adaptive management includes key components of risk identification and management, and a regular openness and willingness to change and adapt project design in changing circumstances. This section focuses on the former. The latter component on adaptive change is discussed under research question 5.2.

[17] The second part of Research Question 1 regarding operational performance and sustainability is discussed under sub-questions 5.3 and 5.5, respectively.

Both KCCMP and USAID report that regular check-ins and discussions of risks and mitigation plans occurred and some examples of the weekly meeting notes were provided to the evaluation team. The notes provided updates on the current status of projects, including some of the tweaks being made to the project in response to feedback or requests from the government. Though challenges appear to be discussed, a regular assessment of the key risks and assumptions noted under research question 1-1.5 was not included. Thus, reporting on risks identified and the corresponding mitigation plans appeared more ad-hoc, in response to specific situations or occurrences. Some information is provided in the KCCMP Annual Reports and in the PMEP regarding risks and challenges encountered; however, the information in these reports is limited and not very detailed. In some cases, brief mitigation plans are mentioned. However, they, too, are not thoroughly detailed.

As noted in the section on assumptions and risks, the documents include some high-level discussion of assumptions; however, the critical risks that are challenging progress towards results within the program are associated with key assumptions that, though folded into the broader assumptions noted in the reports, are not more precisely defined. The risk to not more precisely defining the assumptions underlying project implementation is that the more precise risks/assumptions may be overlooked. For instance, one of the assumptions that was originally included in the project design was, "That the laws in place are sufficiently well designed to drive GHG emissions and energy use reductions if effectively implemented." The various factors incentivizing (or disincentivizing) investments in GHG emission reductions and energy efficiency are not explicitly stated. Thus, factors related to the enforcement of the laws, the availability of adequate credit, the potential financial stress the regulations might put on businesses, and the potential for negative repercussions for public entities that fail to spend their budget (even if due to cost savings) are not explicitly stated. Not explicitly stating these assumptions makes it easier, even inadvertently, to miss a critical risk to achieving results.

In addition to the lack of specificity, the documents do not appear to have given adequate consideration for the extent to which these assumptions/risks threaten the ability of KCCMP to achieve its goals, as was highlighted under research question 1. Additionally, the frequency of Annual Report and PMEP development does not conform to the principle of regular updating and adaptive management that can readily respond to a rapidly changing environment.

When directly asked about their approach to risk identification and mitigation, KCCMP staff reported that they did not attempt to anticipate future risks, as this would involve predicting the future, which is not really possible. Rather, they indicated that the team deals with issues and risks as they arise and impact the project.

Conclusions

Given the above findings, the evaluation team finds there is room for improvement in KCCMP's approach to the adaptive management of key risks and assumptions. The KCCMP project team appears to have taken a more ad-hoc approach to risk management. This opens up the opportunity for key risks to be missed or for identification of significant risks to be delayed, which could cause greater negative impacts than might have otherwise been the case.

A proactive approach to risk identification is not about predicting the future. No one can know for sure what the future holds. Rather, a proactive approach to risk identification and mitigation is about being aware of the broader context and cognizant of the effect that that context might have on a project. Thus, for instance, a proactive approach does not necessarily predict that the Ministry of Environmental Protections would be reshuffled and that the Ministry of Energy would become KCCMP's primary interlocutor. Rather, adaptive management means being cognizant of the fact that, though the Ministry of Environmental Protections was very supportive of the KCCMP principles, that that support was not felt across the broader government. An adaptive management approach would recognize that this lack of broader support from key ministries may have an impact on the success of the project and on the

GoKZ's efforts. Whether the MoE had become KCCMP's interlocutor or not, the MoE plays a critical role in a key sector related to GHG emissions. Thus, its priorities were likely to have an impact on GHG policy making, regardless of the ministerial reshuffling. Ignoring this reality means that a project could start trying to enforce a policy that was never politically feasible instead of working collaboratively with all relevant stakeholders to find a policy compromise that could be implemented.

Similarly, regarding business community opposition, the goal is not to predict when, exactly, the GoKZ will implement the ETS. Rather, it is about being cognizant of the strength of the opposition and how that feeds into some ministries' political priorities. Given the strength of that political opposition, an adaptive management approach would likely suggest greater engagement with this opposition as a means to either mitigating the opposition or adapting the project and/or policy approach to otherwise take it into account.

Sub-question 5.1: Was a baseline study done at the inception phase? Were PMEP plans, evaluation, and reporting done? If not, why not, and what effect has this had on the success of the project? [Baseline and Ongoing Risk Evaluation and Reporting]

Findings

As noted in the limitations section, it does not appear that any baseline study was done to assess the status of relevant KCCMP outcomes on climate change mitigation capacity or energy efficiency. The only pre-project data available from the government was for some of the pilot projects and national GHG emissions. The Year 4 PMEP states that the project still intends to carry out a baseline study. However, given that the project is nearing completion, it is unclear how a baseline study could be performed now, given that project activities are well under way.

In terms of other types of programmatic and performance reporting, the PMEP was completed. Though initial iterations of the PMEP did not include a full set of targets for all indicators, by the Year 4 PMEP, all indicators had targets and were currently reporting data. This midterm evaluation fulfills requirements regarding project evaluation.

One aspect of the PMEP that the evaluation team did note for potential improvement, however, is that the indicators selected at all levels are short-term in nature. Though the PMEP identifies the longer-term objectives of the project, such as improved capacity, energy efficiency gains, and reductions in GHG emissions, the indicators themselves do not fully address these longer-term objectives.

In terms of budgetary reporting, the evaluation team was unable to obtain the current status of the budget in terms of expenditures or budget remaining. Both USAID and KCCMP indicate that budget reporting was done; however, high-level budget details are typically included in quarterly and annual reporting. In KCCMP's reports, though, this data was not provided directly, and readers are referred to alternate documentation, which was not available to the team. Thus, it is not possible for the evaluation team to assess budgetary performance or burn rates on operational performance under sub-question 5.3. It also reduces the overall transparency of the project.

Conclusions

The evaluation team finds that the PMEP requirements are being followed, though some weaknesses were found regarding the indicators that were selected. The lack of available budgetary reporting limits the evaluation team's assessment of operational performance and reduces the overall transparency of the project.

A baseline study was not conducted for this project, which has two primary effects on the project. One, it prevents a detailed analysis of the extent to which outcomes such as capacity or energy efficiency have

been achieved. Two, it prevents the project from using detailed information on the current status of key outcomes to better design and enhance the project.

Measuring capacity is not an easy task. However, there are several options that could have been employed to conduct a baseline assessment. The most precise (and the most expensive) would have been to conduct a large-scale quantitative survey of each of the three main groups that received training—government actors, business community actors, and energy professionals. The survey could have focused on the key areas of capacity that are necessary for each of the types of actors (for instance, the survey of government actors may have focused on general energy efficiency and GHG skills or knowledge, cross-ministry managerial skills, large stakeholder group collaboration skills, etc.). The survey then would have provided an average score for each of the specific capacity areas for each trainee group. The survey could then be repeated at the end of the project so that the average scores could be compared and the change in capacity could be measured. Given the costs, however, it's possible that such a large survey may not have been feasible. In such a case, other options are still available.

A briefer, more qualitative baseline study could also have been conducted. This type of study could have been used to both identify key areas of capacity needed for each group of actors as well as provide an assessment of the current status of their skill/knowledge set. Whereas the survey option above would likely result in a more precise quantitative assessment of each capacity level (scoring 45/100, for instance), a more qualitative baseline could still produce a quantitative ranking of skill levels based on the interviews/focus group discussions conducted. Rather than a precise score, each capacity area could be given a ranking of 1 to 10, where 1 is "no current capacity" and 10 would be "full capacity and independence." In either the survey or the qualitative baseline, the study provides two key inputs—it provides an assessment of pre-project capacity that can be used to assess change over time, and it also would provide additional detail about the specific capacity areas that the project should focus on, thereby informing project design.

If the qualitative study were also infeasible, it is also possible to use a pre-test/post-test assessment. Whereas the above two options would focus on each of the stakeholder groups more broadly, this option would focus just on those who are directly participating in project activities. In this option, participants in trainings would be given a pre-test, asking questions and testing the participants' skills and knowledge before the training is conducted. A similar post-test could then be administered after the training, and the two scores could be compared to measure what the trainees learned.

Sub-question 5.2: How, if at all, was the program's implementation adapted in response to changing circumstances? [Adaptive Management]

Findings

Adaptive management includes a specific focus on the identification and mitigation of risks as well as a general ability to adapt the project to changing circumstances and in response to data and feedback about project performance. Project staff were able to provide the evaluation team with some examples of the project changes that have been implemented in response to the changing environment in Kazakhstan as well as with some examples of the regular meetings that occur between the project team and USAID where progress and changes are discussed.

In terms of some of the major changes that were made in response to new circumstances, the project team noted several changes that were instituted while work on the ETS was stalled due to the need for legislative reform. The changes include an expansion of energy efficiency activities and the expansion of the pilot projects to Almaty, shifting more of the capacity building efforts to the business community from the government, and seeking high-level input from international entities.

The weekly meeting reports also provided a glimpse into ways in which the project was adapted to fit new demands and feedback from stakeholders. In one case, additional capacity building efforts were introduced at the request of the government. In another case, training materials were being updated based on feedback from stakeholders.

Conclusions

The project team appears to be making changes to project design in response to changing circumstances. Whether all necessary or potentially beneficial changes have been implemented is not possible to say given the documentation available to the evaluation team. However, given the requests for additional openness to feedback regarding some project components from some stakeholders, some additional incorporation of feedback may be helpful. Additional focus on the identification and mitigation of risks also has the potential for identifying ways in which the project could be improved.

Sub-question 5.3: What was the operational performance of the contractor and USAID team, in particular their management effectiveness and efficiency? [Operational Performance]

Findings

USAID indicates being very satisfied with KCCMP performance. Likewise, according to the performance indicators included in the PMEP, KCCMP appears to be reaching the milestones set forth in the plan. However, the evaluation team notes that the indicators included in the PMEP plan are very short-term in nature (number of people trained, number of new policies, etc.) and do not focus on longer-term achievements such as energy efficiency gains or changes in GHG emissions, which are the ultimate goals of the project. Thus, though the PMEP can assess KCCMP's shorter-term accomplishments, it does not extend to the achievement of longer-term objectives.

Through the interviews, the evaluation team heard very positive reviews of the KCCMP team's technical performance, with five out of the six respondents who discussed the topic reporting positive feedback. Regarding training and other technical aspects, stakeholders were largely very pleased with KCCMP. However, the team heard complaints from several stakeholders regarding KCCMP senior management and a lack of professionalism and cooperation.

Regarding budgetary performance, as noted above, the evaluation team was unable to obtain data on the current status of the budget. Thus, the team is unable to assess the budgetary performance or current burn rate for the project.

Conclusions

KCCMP appears to be performing well from a technical perspective, though there appears to be some room for improvement regarding some management aspects. Unfortunately, no evaluation of budgetary performance was possible given available data.

Sub-question 5.4: What is the probability that the activities launched now need to change to better align program activities with changed circumstances? [Program Refocus]

Findings

Interviewees suggest a variety of changes to the KCCMP program that might be needed. While two interviewees indicated that no changes were needed, business community respondents had more to say about suggested improvement, though their answers focused more on potential changes to the ETS than on the KCCMP project specifically. Given the role of KCCMP in supporting the GoKZ's efforts to implement the ETS, however, the evaluation team believed it pertinent to share these perspectives, especially as they may provide suggestions for additional support that could be provided to the government. The evaluation team met with three different business associations. These associations were weighted towards the sectors and sizes of businesses that are most impacted by the LES and

ETS—namely, larger companies and those in the industrial and energy sectors. Though each provided its own specific recommendations and perspectives, together, they provided a similar set of recommendations. In one case, the research team heard calls for a better appreciation and incorporation of businesses concerns, particularly regarding the ETS. The team also heard that there were concerns that KCCMP was being too rigid in their approach and was unwilling to compromise so that the policies would be less detrimental to businesses. There was also a suggestion for implementation of the ETS to be made more gradual so that businesses would have more time to respond and invest in improvements. There was also a request for the ETS to be expanded to include all sectors of the economy, to spread the burden more broadly.

Outside of these recommendations from the business community for improving government policies, however, the evaluation team did not receive any other feedback regarding ways to improve the project. However, the findings from other areas of the evaluation hint at some additional ways the project could be improved. These additional recommendations will be discussed in the final section on evaluation recommendations.

Conclusions

The only feedback the evaluation team specifically received regarding programmatic improvements was about the ETS. Though the ETS is not under the direct control of the KCCMP project, KCCMP's role in supporting the government's efforts to implement the ETS does provide an avenue by which KCCMP could use this feedback to push the government towards a more inclusive approach by engaging with the business community and a push to recognize and address the business community's opposition.

Sub-question 5.5: What is the likelihood that this project will continue providing significant benefits for a long time after project completion? [Sustainability]

Findings

Though there is not a written sustainability plan in place for KCCMP activities, project staff have tried to take sustainability into account in the design of each project component. For the IACs, KCCMP utilized models that had been successfully used elsewhere and placed an emphasis on establishing business plans for each IAC. For the pilot projects, they requested MOUs with the local governments, trained staff in each municipality, and provided guidance documents. For the AEE, Verifiers Forum, and Climate Leadership Forum, efforts were made to ensure that these would be able to continue to function after the end of the project. For other activities that were not necessarily intended to continue (but for which the benefits are expected to continue) such as the support to the government in crafting and implementing legislation or specific trainings to government entities, attempts were made to engage a wide range of individuals and stakeholders so that benefits will continue through the existence of new laws and regulations and through the individuals trained.

In terms of assessing the extent to which these efforts were successful in achieving sustainable benefits, inquiring about the sustainability of results assumes that the initial intended results were achieved. As discussed above, the extent to which some of the longer-term outcomes expected through KCCMP will be achieved (and can be documented) is unclear, particularly considering the lack of accurate baseline data. For shorter-term achievements, such as training, it can be expected that, if those individuals continue to practice the skills they have learned, the capacity built will not be entirely lost. However, as noted previously, at the government level, high staff turnover can negatively affect the ability for that increased capacity to assist the government in the way the project intended.

For the IACs, three of the four entities spoken with noted that the sustainability of their operations would depend on their ability to obtain necessary equipment and achieve accreditation. KCCMP reports that they independently verified that all IACs had equipment before the start of the project as a requirement for participation in the program. Responses from three of the IACs, however, indicate that

a lack of equipment is a primary constraint for their success. The evaluation team was not able to independently confirm what equipment was available at each of the IAC sites. It may be possible that, though the IACs have a minimum amount of equipment, they desire more and/or better equipment to do an even better job or achieve higher qualifications. Project staff also indicated that, because some of the IACs were not independent legal entities, some of the equipment may have been shared with other schools or departments, which may also be influencing IAC's desire for equipment. USAID would need to confirm these issues, however, as a detailed examination of the available equipment was outside the scope of this evaluation.

For the sustainability of the Verifiers and Climate Leadership Forums, as noted above under research question 3.6, though advances are being made towards ensuring the sustainability of the Climate Leadership Forum, the sustainability of the Verifiers forum is in doubt.

For the LES, as previously stated, government enforcement is currently weak, and many businesses find it more financially beneficial to pay fines than to comply with regulations. Unless this disincentive to invest in energy efficiency is remedied, it is unlikely that substantial gains in energy efficiency will be realized in the immediate term, let alone in the longer term. For the ETS, any benefits will ultimately depend on the program's final implementation, which is currently uncertain. For the program as a whole, KCCMP does not currently have a sustainability plan beyond the anticipated funding of the follow-on activity.

Conclusions

Without appropriate planning to ensure program sustainability, it will be very challenging to ensure that the benefits of KCCMP do not end along with the program. In the case of the pilot projects, sustainability will depend on strong appropriation of the systems by the local governments and by the recipient entities. As noted by another donor, this has been a challenge in previous, similar projects, so early attention to this issue is likely to be critical to sustainability. In terms of the IACs and professional energy training, though some challenges seem to exist, the evaluation team finds it likely that they will be able to continue their operations after the end of the project.

For all activities that the project hopes will continue after the end of the project, such as the verifiers forums, a plan needs to be made for a local entity to take full control of the activities, and future funding streams need to be identified to support the activities.

KEY RECOMMENDATIONS

1. It is recommended that KCCMP stop planning for new EMMS pilots, as their sustainability is currently in doubt. It is recommended that KCCMP begin the process of handing over the existing systems to the beneficiaries or to relevant service companies, as the hand-over process is expected to take considerable time and is expected to be complex, based on the experience of UNDP and other donors. It is recommended that KCCMP consult with UNDP and other relevant donors about their experiences with these types of transfers.
2. It is recommended that support for the four Industrial Assessment Centers (IACs) be continued, as the use of regional technical universities is a very promising way to provide ongoing energy management and GHG mitigation training in Kazakhstan after the end of KCCMP activities on September 30, 2017. It is recommended that the IAC's scope be expanded from just providing training on energy audits to becoming Clean Energy Centers. It is recommended that the existing four IACs, and any other interested state technological universities (if feasible, given the time and budget remaining), focus on undergraduate, post-graduate, and professional energy management and GHG mitigation training covering all sectors (not just the industrial sector). It is recommended that KCCMP give priority to utilizing its remaining time and funds to the development of the new Clean Energy Centers, along with

purchasing and transferring the necessary technical equipment needed.

3. It is recommended that KCCMP's ETS support continue to focus on the development of a benchmarking approach that is accepted by the business community and the GoKZ for future free GHG allocations, a best practice GHG monitoring and verification (M&V) system, UNFCCC-compatible GHG inventory data gathering and reporting, and other relevant ETS technical matters. It is also recommended that KCCMP enhance efforts to engage the business community and government in resolving key outstanding ETS issues. It is recommended that international experts/facilitators with ETS experience from the full range of different countries with existing or planned ETSs be used, and not only from the US and Europe.
4. It is recommended that USAID update its adaptive management practices to include better documentation of risks, risk assessments, and risk mitigation strategies. It is also recommended that these assessments consider the impact of the additional assumptions highlighted in this evaluation. In addition to risk management documentation, it is also recommended that USAID improve budget documentation so as to better inform future planning.
5. In the future, should another project similar to KCCMP be introduced, it is recommended that a baseline study be conducted to assess the current status of expected outcomes. There are multiple options for how to conduct such a study—some of which have larger cost implications than others. USAID should assess the cost-benefit of the different options to determine which option would best suit the need. Regardless of the option chosen, baseline information will both improve the program's accountability and support improved programming.

ANNEX I: EVALUATION STATEMENT OF WORK

DESCRIPTION / SPECIFICATIONS/STATEMENT OF WORK

C.1 TITLE

Kazakhstan Climate Change Mitigation Program Evaluation

C.2 PURPOSE

This external evaluation of the Kazakhstan Climate Change Mitigation Program comes after two years of the activity implementation. It is a performance evaluation, with the objectives of helping determine what components and project aspects worked well and why, which did not and why, and to make informed decisions in planning the new project, scheduled to be awarded 2017. The purpose of this evaluation is to test primary objectives set in the KCCMP contract and to provide pertinent information, statistics, and judgments that assist USAID to learn what has been accomplished.

C.3 PROJECT BACKGROUND AND CONTEXT

C.3.1 PROBLEM/OPPORTUNITY ADDRESSED

The purpose of this project is to help Kazakhstan achieve long term and sustained reductions in greenhouse gas (GHG) emissions intensity by supporting the government and business community in Kazakhstan in the implementation of GHG reducing policies and measures at the project, corporate, and national levels. After taking on ambitious international commitments to reduce Kazakhstan's GHG emissions, the Government of Kazakhstan (GoKZ) passed many of the framework policies that would support the implementation of this goal, such as a Law on Energy Savings and Energy Efficiency (LES) and a GHG emissions trading system (ETS). While the framework policies for low emissions development are in place, the government and the business community are still struggling to administer and comply with those policies. Without strong implementation, the country's GHG reduction goals will not be achieved.

As the flagship activity for President Obama's Global Climate Change Initiative (GCCI) and the Enhancing Capacity for Low-Emission Development Strategies (EC-LEDS) program in Kazakhstan, this program supports Kazakhstan's efforts to pursue long-term, transformative development and accelerate sustainable economic growth while slowing and eventually reversing the growth of GHG emissions. The implementer for this activity will achieve this goal through a systematic approach that engages a broad set of stakeholders. This includes assistance to the GoKZ in developing, implementing, and enforcing policies, regulations and/or procedures that provide real reductions in GHG emissions while strengthening the technical and institutional capacities of GoKZ agencies; building the capacity of the business community in Kazakhstan to measure and manage their GHG emissions and energy consumption and take action within their own operations; and, improving the university-level training for the next generation of climate and energy professionals in Kazakhstan.

C.3.2 EXISTING INFORMATION

The team may find it useful to consult a broad range of background documents apart from project documents provided by USAID.

USAID and the Kazakhstan Climate Change Mitigation Program will provide the evaluation team with a package of briefing materials, including:

- USAID Central Asia Regional Development Cooperation Strategy (2015-2019)
- USAID Global Climate Change Initiative

- KCCMP Contract (2013) and Modified Contracts (2014-2016)
- KCCMP Year 1, 2 and 3 Work Plans
- KCCMP Annual Reports, 2014 and 2015
- KCCMP Quarterly Reports, 2014-Present
- KCCMP Initial Performance Monitoring and Evaluation Plan (PMEP), 2014
- KCCMP Annual PMEP Report, 2015
- Additional resources will be made available by the Project Team and USAID upon award and request

C.3.3 PROJECT INTENT

The goal of this project is to support Kazakhstan as it pursues long-term, transformative development and accelerate sustainable economic growth while slowing and eventually reversing the growth of GHG emissions. The Kazakhstan Climate Change Mitigation Project will address three objectives (tasks):

- improve the capacity of the GoKZ to implement and enforce GHG reducing policies and measures;
- build the capacity within the business community to comply with GHG reducing policies and measures; and
- improve the professional education of energy and climate change specialists in Kazakhstan.

Given the rapidly evolving policy environment in Kazakhstan, the KCCMP will embrace the principles of adaptive management and work to update programmatic management tools, such as the full integrated Work Plan and PMEP, at strategic intervals, such as following an initial update and assessment of the status of the ETS and LES. Design and prioritization of activities under each of the tasks should also allow for periodic feedback from stakeholder consultations.

C.4 EVALUATION PURPOSE AND INTENDED USES

This external evaluation comes after two years of KCCMP implementation. It is a performance evaluation, with the objectives of helping determine what components and project aspects worked well and why, which did not and why, and to make informed decisions in planning the new project, scheduled to be awarded in 2017.

The purpose of this evaluation is to test primary objectives set in the KCCMP contract. The evaluation will provide pertinent information, statistics, and judgments that assist USAID to learn what has been accomplished.

The evaluation results will be used for program improvement gaining continued support from management, assessing replication of program successes and for designing new activities.

C.5 EVALUATION QUESTIONS

There are fore principal questions that are management priorities for understanding how the project performed, and for using that insight to inform future activity planning and implementation.

1. To what extent have the GoKZ's capacity to implement and enforce greenhouse gas (GHG) reducing policies and actions improved as the results of KCCMP's support?
    a. What new laws or statutes have been passed by the Legislature?
    b. What policy or administrative guidelines have been issued by regulatory agencies?
    c. To what extent have government agencies reduced their energy consumption and costs?

    d. What are key factors contributing and/or obstructing the GoKZ's implementation and enforcement of the GHG policies and actions to date? How best to overcome the obstacles?
2. To what extent has the capacity of the business community to take emission reducing actions improved as the results of KCCMP's support?
    a. How has the level of awareness of how to reduce emissions changed within the business community since the project began?
    b. What if any declarations or statements on GHG reduction have the business community associations made since the project began. (e.g. Adoption of Energy Efficient criteria)
    c. To what extent has the level of GHG emissions in business/industrial areas changed since the project began?
    d. To what extent have businesses increased their marketing of energy efficient products?
    e. What are the remaining needs/gaps for capacity building? How best to address them?
3. What, if any, improvements have occurred in Professional training of GHG and energy management specialists in Kazakhstan since the start of the project?
    a. Attendance at training workshops or conference presentations
    b. Requests for publications (by government employees, suppliers, and other, nongovernment purchasers)
    c. [If it doesn't exist already] Creation or adoption of peer reviewed GHG and energy management training materials.
4. To what extent did the original design's assumptions, limitations, and assessment of risks hold true during the project?
    a. Operational performance of the contractor and USAID team (particularly their management effectiveness and efficiency).

C.6 DATA COLLECTION METHODS

The evaluation team shall begin its work with a review of all the existing information, desk review of relevant documents (project documents, quarterly and annual project reports, progress reports on project activities, performance indicators, etc.). It must also be prepared to conduct interviews with key counterparts. Below are some suggested methods.

- Individual or group interviews with representatives of project partners and additional stakeholders;
- Interviews with project beneficiaries;
- Meetings with representatives of USAID/Central Asia and Kazakhstan Country Office;
- Meetings with national and local government officials, as appropriate;
- Site visits to project target areas.

C.7 EVALUATION PERFORMANCE INDICATORS

Policy Awareness:

- Attendance at training workshops or conference presentations
- Requests for publications (by government employees, suppliers, and other, non-government purchasers)
- Survey responses from target audiences (e.g., public officials, managers, technical staff, agency employees, vendors, contractors)

Policy Adoption:

- Laws or statutes adopted
- Policy or administrative guidelines issued

Program Implementation:

- Technical specifications for energy efficient (EE) and GHG inventory
- Demonstration energy efficiency models developed
- Training materials developed and delivered
- Funding leveraged

Results:

- EE models, products supported by government
- EE models, products replicated by government

Public Sector Impacts:

- Reduced energy consumption and costs for government agencies
- Reduced GHG emissions

Market Impacts:

- Adoption of government EE criteria by other buyers (private firms, consumers, or other governments)
- Introduction of new EE models that meet government criteria
- Increased marketing of EE products by suppliers, manufacturers, or importers

C.8 DATA ANALYSIS METHODS

Prior to the start of data collection, the evaluation team will develop and present, for USAID review and approval, a data analysis plan that details what procedures will be used to analyze data from qualitative methods including focus group discussions (FGDs), key informant and other stakeholder interviews; and how the evaluation will weigh and triangulate qualitative data from these sources with quantitative data.

ANNEX II: EVALUATION METHODS AND LIMITATIONS

DATA SOURCES

SI, Washington			
	Implementers	Direct Beneficiaries	Indirect Beneficiaries/External Experts
Desk Review (DR)	USG: KCCMP documents (planning, implementation, and review) KCCPM Implementing Partners: KCCMP activity and financial reports	Information from USAID, Department of State and other USG Climate Change projects	Kazakhstan Climate Change reports
Key Informant Interviews (KIIs)	USAID Central Asia Economic Development Office, Almaty, USAID Agreement Officer's Representative, USAID Kazakhstan Country Office, Astana (USAID);		
Kazakhstan			
	Implementers	Direct Beneficiaries	Indirect Beneficiaries/External Experts
Desk Review (DR)	KCCPM and Kazakhstan reports	Reports from beneficiaries that arise during the field work phase	World Bank and other donors' reports, academic papers, etc
Key Informant Interviews (KIIs)	USAID Central Asia Economic Development Office, Almaty, USAID Agreement Officer's Representative, USAID Kazakhstan Country Office, Astana (USAID); KCCMP Management Unit, Tetra Tech, Astana (MU-TT(M) Management and MU-TT(T) Technical) and Central Business Community Organizations as implementing partners of KCCMP in the capital city	Project Trainers and Trainees (T&T); Educational and Professional Organisation (Ed&PO); Business Community (BC)	Other donor agencies and international organizations supporting similar projects in Kazakhstan (DA&IO); Central Kazakh Government (GOVK) Indirect beneficiaries of KCCMP (Pilot EMMS) involved in the field works in Astana, Almaty, Karaganda, Pavlodar and Ust-Kamenogorsk; Local GoKZ GHG Pilot Projects (LGoKZ)

ANNEX III: DATA SOURCES, COLLECTION METHODS, AND ANALYSIS METHODS

Evaluation Question	Data Sources/ Code	Data Collection Methods	Data Analysis Methods
KCCP PROJECT DESIGN, MANAGEMENT AND SUSTAINABILITY			
QUESTION 1 To what extent were the original design assumptions, limitations, and assessment of risks explicitly stated and did they hold true during the project? • Have the original design assumptions remained relevant during the project to date? • Have any unforeseen challenges occurred during the project? If yes, how did they impact the outputs and outcomes of the project?	USAID MU-TT	DR KII	Comparison of explicit and implicit assumptions in pre-inception and inception documentation with risks identified during implementation - by connecting and interrelating qualitative and quantitative performance monitoring data and interview results
Sub-question 1.1 Did the project's management formally identify and then validate the assumptions made in the design phase? What impact have the key assumptions made had on the design and implementation phases? • Are the activities specified in the design still the best strategy for the attainment of the project's objectives in light of changed LES, ETS, economic and other relevant factors?	USAID MU-TT	DR KII	Assessment of the project management's ability to identify and respond to changing circumstances by qualitative analysis of project documentation and interviews
Sub-question 1.2 To what extent did the project consult and use the skills, experience and knowledge of relevant representatives of donor organizations, business, government, NGOs and academia during the design of project activities? To what extent was this knowledge gained useful (positively or negatively) for project? • Were the lessons learned during other USAID and other international partners' projects properly taken into account during the project's	USAID MU-TT DA&IO Ed&PO	DR KII	Evaluation of the inputs by local partners and beneficiaries to the final program by qualitative analysis of program documentation and interviews. Assessment of incorporation of gender considerations by review of documentations and qualitative interview analysis

design? • Were Public Private Partnership mechanisms properly taken into account and were negotiations on relevant responsibilities of the parties held prior to project approval? • Did the program design explicitly incorporate gender considerations in the activity selection and planning?			
Sub-question 1.3 How has the management model proposed by the project influenced the project implementation and outcomes? • Did the local parties concerned participate in project management and decision-making and if they did, how did they do it? • What are the strong and weak aspects of the approach taken by the project? • Does the project monitoring and evaluation plan include preconditions (including data, methodology, etc.), SMART indicators and a system of data analysis as well as evaluation reviews at specific times for assessing the outcomes and relevant funding of monitoring and evaluation activities?	USAID MU-TT	DR KII	Analysis of KCCMP and USAID management mechanisms by connecting and interrelating qualitative information and quantitative performance monitoring data
Sub-question 1.4 Were the risks identified in the Task Order, and KCCMP and USAID reviews on project implementation, the most critical risks? • Are there additionally identified risks? • Is the system of risk identification effective? What kind of risk management system was used? • Is the project on track to achieve the planned Outputs? If not, why not? • Were there any delays during project implementation and what were the reasons behind such	USAID MU-TT	DR KII	Comparison of risk assumptions in pre-inception and inception documentation with risks identified during implementation by connecting and interrelating qualitative and quantitative performance monitoring data and interview results

delays?			
KCCMP Project Implementation and Results			
QUESTION 2 *To what extent has the GoKZ's capacity to implement and enforce greenhouse gas (GHG) reducing policies and actions improved as a result of KCCMP's support?* • What was the status of the GoKZ's capacity prior to KCCMP's support and how has it improved as the result of KCCMP's support? • What is the place of GHG reduction and EE promotion among the wider strategic priorities of GoKZ? • Has the importance of KCCMP activities been effectively conveyed to GoKZ and business community	GOVK DA&IO Ed&PO BC	DR KII	Evaluation of the program's impact on capacity development by quantitative and qualitative analysis of program documentation, trainings provided and interview results
Sub-question 2.1. What new laws or statutes have been passed by the Legislature? • To what extent did any new laws contribute to national priorities in GHG reduction policies? • To what extent does the program facilitate compliance with LES and ETS? • How effective were market mechanisms to improved the involvement of the business community?	MU-TT GOVK DA&IO Ed&PO	DR KII	Assessment of new laws' contribution to final program outputs and outcomes by analysis of quantitative targets of the laws and qualitative interview data
Sub-question 2.2 To what extent have new GHG mitigation related laws conflicted with other strategic, economic and industrial plans of the Ministries of Energy, Investment and Development and National Economy? • Has the project thoroughly assessed the agenda of the abovementioned ministries in order to avoid any contradictions? • If any, how have the potential conflicts been addressed?	GOVK DA&IO Ed&PO	DR KII	Quantitative and qualitative analysis of existing strategies and potential conflicts with KCCMP. Review of strategic documents and existing studies. Interview qualitative results.

Sub-question 2.3 What policy or administrative guidelines have been issued by regulatory agencies? • How effective were policy and administrative guidelines in achieving final outcomes? • What tools were developed to facilitate compliance with EE and GHG policies and guidelines?	MU-TT GOVK DA&IO LGoKZ	DR KII	Assessment of policy tools and guidelines to facilitate new laws and/or administrative guidelines using qualitative data analysis
Sub-question 2.4 To what extent have government agencies reduced their energy consumption and costs? • Has the KCCMP program helped to improve government agencies' commitments to reduce their own energy consumption and costs? • Are there any mechanisms to upscale any pilot projects to other government agencies?	GOVK DA&IO LGoKZ	DR KII	Evaluation of impact of pilot projects and government agencies capacities to upscale them by quantitative projects documentation and qualitative interview analysis
Sub-question 2.5 What are the key factors that have been contributing to and/or obstructing the GoKZ's implementation and enforcement of EE/GHG policies and actions to date? How can these obstacles be overcome? • Have the GoKZ GHG/EE policies and actions met resistance from the business community? • How comprehensive really was the GoKZ's support for the LES, ETS, etc? • Were all the necessary incentives (both positive and negative) for LES, ETS, etc compliance in place for the business community and for the public sector? • How could the opposition to KazETS, which caused delay till 2018, have been addressed?	MU-TT GOVK DA&IO F-DB Ed&PO BC	DR KII	Understanding contributing and obstructing factors by qualitative analysis of interview data. Qualitative review of EE/GHG laws' implementation and enforcement.
QUESTION 3 *To what extent has the capacity of the business community to take emission-reducing actions improved as the result of*	GOVK BC LGoKZ	DR KII	Understanding and evaluation of KCCMP's support to the BC aiming to improve the capacity to take the emission-reducing actions by qualitative analysis of interviews

KCCMP's support? • What was the capacity of the business community to take emission-reducing actions prior to KCCMP's support? • How has it been improved as a result of KCCMP's support? • What challenges lay ahead • How did KCCMP's support affect women-owned businesses (both positively and negatively)?			
Sub-question 3.1 How has the implementation of KCCMP affected GHG emissions? • How has the level of awareness of how to reduce emissions changed within the business community (BC) since the project began? • How adequate was the LES and the measures proposed by the project on the creation of favorable conditions for the BC?	GOVK BC LGoKZ	DR KII	Evaluation of program's impact on GHG emissions by quantitative analysis of emissions data and qualitative interview data analysis
Sub-question 3.2 To what extent did the project help establish systems for high quality data management and corporate level *MRV* to meet the reporting burdens required by both the LES and/or ETS? • What if any evidence is there that the BC becomes more comfortable with reporting and data gathering and management? • How has the BC utilized tools developed by the project and its technical assistance to achieve energy saving targets of the LES and to implement the least-cost compliance strategy for the ETS? • What is the level of transparency and ease of accreditation process for GHG Verifiers, CEMs (Certified Energy Managers) and Energy Auditors?	GOVK BC LGoKZ	DR KII	Evaluation of data management and corporate level MRV by review of the guidelines and tools and qualitative interview data analysis. Understanding the transparency of admittance procedures of auditor/verifier organizations.
Sub-question 3.3 How did the project help the BC to overcome the key challenges faced in	MU-TT GOVK BC	DR KII	Assessment of KCCMP's support to the BC by qualitative interview data

adopting GHG mitigation and energy saving measures? • How adequate and effective were the trainings and technical assistance provided to the BC for EE application, achieving energy saving targets by LES and implement the least-cost compliance strategy for ETS? • Did the BC become self-reliant in these areas? • What if any declarations or statements on GHG reduction have the BC associations made since the project began (e.g. Adoption of Energy Efficiency Criteria)?	LGoKZ		analysis.
Sub-question 3.4 How successful was the process of identification and preparation of pipelines of technically feasible and commercially viable energy and resource efficiency projects? • How were experiences of other organizations (UN, EBRD, EU, WB, GEF etc.) utilized? • How many of those projects were financed and by whom and with what budget?	MU-TT GOVK DA&IO LGoKZ	DR KII	Assessment of KCCMP's capacity to assist with the projects by analysis of quantitative projects documentation and qualitative interview analysis
Sub-question 3.5 To what extent *the Market Simulation Courses* help BC associations improve their *Climate Action Plans*? • To what extents has the BC increased their marketing of EE products?	GOVK BC LGoKZ	DR KII	Evaluation of the courses' impact on the BC by review of course materials and qualitative interview data
Sub-question 3.6. How sustainable is *the Auditor and Verification Forum* [the former Climate Corps] for conducting future annual events to provide training or retraining to verifiers as warranted by new requirements? • What other potential opportunities for networking and partnerships were utilized by the BC?	MU-TT GOVK T&T Ed&PO LGoKZ	DR KII	Assessment of the capacity development tools and the BC cooperation capabilities by qualitative interview data analysis

• What are the remaining needs/gaps for capacity building? How best to address them?			
QUESTION 4 What, if any, improvements have occurred in Professional Training of GHG and energy management specialists in Kazakhstan provided by the project? • How well were GHG and energy management specialists trained with KCCMP's support and how has it improved as the result of KCCMP's support? • How could training assist to reach the final outcomes? How could they be improved?	MU-TT T&T Ed&PO BC LGoKZ	DR KII	Assessment of the training development tools and the trainings provided by qualitative interview data analysis
Sub-question 4.1 To what extent was the design of professional trainings provided by the project appropriate to the Kazakh country context? • Has the local context been properly taken into account during the design of the trainings? • What did the challenges encountered impact on the design of the trainings? • What are the business opportunities for trained GHG Verifiers, CEMs and Energy Auditors/Experts?	MU-TT T&T Ed&PO BC LGoKZ	DR KII	Quantitative and qualitative evaluation of the training materials, attendance reports and training providers and trainees interview data
Sub-question 4.2 How well were the project trainings targeted for the different audiences of government officials, business community and academia? • Did the trainings designed for different groups address their needs/agenda or were they universal/generic trainings? • How was personnel turnover (especially among government officials) addressed in order to sustain a sufficient ongoing training capacity built?	MU-TT T&T ED&PO LGoKZ	DR KII	Qualitative evaluation of the training materials and qualitative interview data

Sub-question 4.3 What are the mechanisms to adapt trainings to new requirements and to ensure that trainings and training results will continue beyond the project completion date? • Have the content of the trainings changed according to new requirements? • Have the trainings also included feedback from participants to ensure improvements?	MU-TT Ed&PO LGoKZ	DR KII	Understanding management capabilities to adapt trainings accordingly and to sustain training results by qualitative interview analysis
Sub-question 4.4 How did GHG trainings address energy management issues and vice-versa? • Did the training of GHG specialists involve learning aspects of energy management and vice-versa? • Did trainings involve topics beyond their specific area? (Wider economy impacts, effects of global climate change, ISO 50001, externality costs, etc.)	MU-TT T&T Ed&PO LGoKZ	DR KII	Review of training materials and qualitative interview analysis
Sub-question 4.5 To what extent have the training workshops improved female involvement in GHG and EE activities? • To what extent have the training workshops and conference presentation improved female involvement, capacity development and empowerment?	MU-TT T&T Ed&PO LGoKZ	DR KII	Quantitative analysis of training attendance reports and qualitative interview data analysis and qualitative interview data analysis broken down by gender.
Sub-question 4.6. What was the output of the various trainings? • What was the attendance at training workshops or conference presentations? • How many requests for publications (by government employees, suppliers, and other, non-government purchasers) have there been? • What number of new peer reviewed GHG and energy management training material have been created	MU-TT T&T Ed&PO LGoKZ	DR KII	Quantitative analysis of training attendance reports and quantitative interview data analysis.

or adopted?			
QUESTION 5 To what extent did the KCCMP program and USAID identify and manage risks to the original design assumptions during its implantation phase to date? How was the operational performance and sustainability of the project? • What is the capacity of management in risk management and sustainability of the project?	USAID MU-TT	DR KII	Understanding of risk and adaptive management capacities of their management - by review of program documentation and by qualitative interview results analysis
Sub-question 5.1. Was a baseline study done at the inception phase? Were PMEP plans, evaluation and reporting done? If not, why not and what effect has this had on the success of the project? • What is a capacity of management in baseline and ongoing risk evaluation and reporting?	USAID MU-TT	DR KII	Understanding of baseline and ongoing risk evaluation and reporting by reviewing program documentation and by qualitative interview data analysis
Sub-question 5.2. How, if at all, was the program's implementation adapted in response to changing circumstances? • How was adaptive management applied during the implementation of the project?	USAID MU-TT	DR KII	Evaluation of adaptive management capabilities by review of program documentation and by qualitative interview data analysis
Sub-question 5.3. What was the operational performance of the contractor and USAID team, in particular their management effectiveness and efficiency? • How effective and efficient was the management of the contractor and USAID team?	USAID MU-TT	DR KII	Evaluation of management effectiveness and efficiency by review of program documentation and by qualitative interview data analysis
Sub-question 5.4. What is the probability that the activities launched now need to change to better align program activities with changed circumstances? • How well is the ability of the project to refocus?	USAID MU-TT	DR KII	Evaluation of adaptive management practices and capabilities by qualitative interview data analysis

Sub-question 5.5 What is the likelihood that this project will continue providing significant benefits for a long time after project completion? • Are the two initial assumptions underlining the design of this project still valid - and will they still be valid after the project's completion? • How will the project's benefits continue on within the project framework or beyond upon its completion (including business community interest, state obligations and integration of project objectives into more extensive policies in the development field and sectoral plans)?	USAID MU-TT	DR KII	Assessment of the project management's ability to identify and achieve sustainability of program's results by qualitative analysis of project documentation and interviews' analysis

ANNEX IV: SOURCES OF INFORMATION

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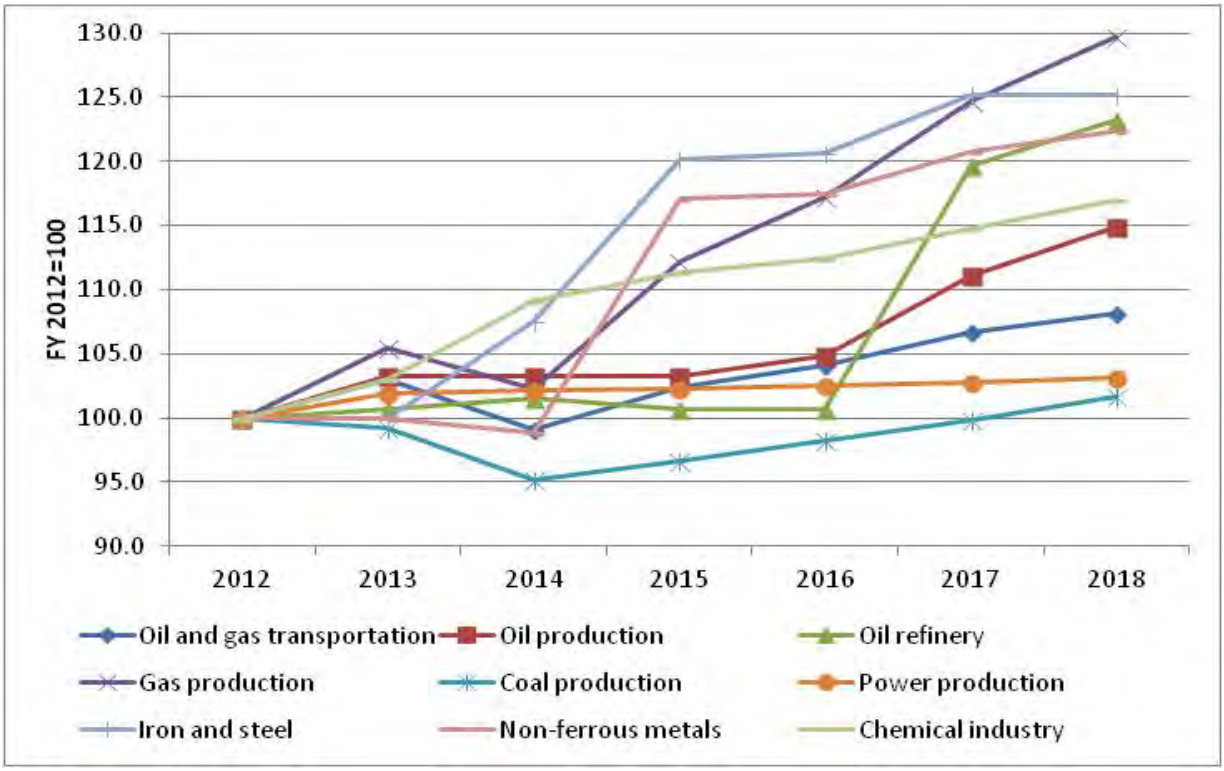
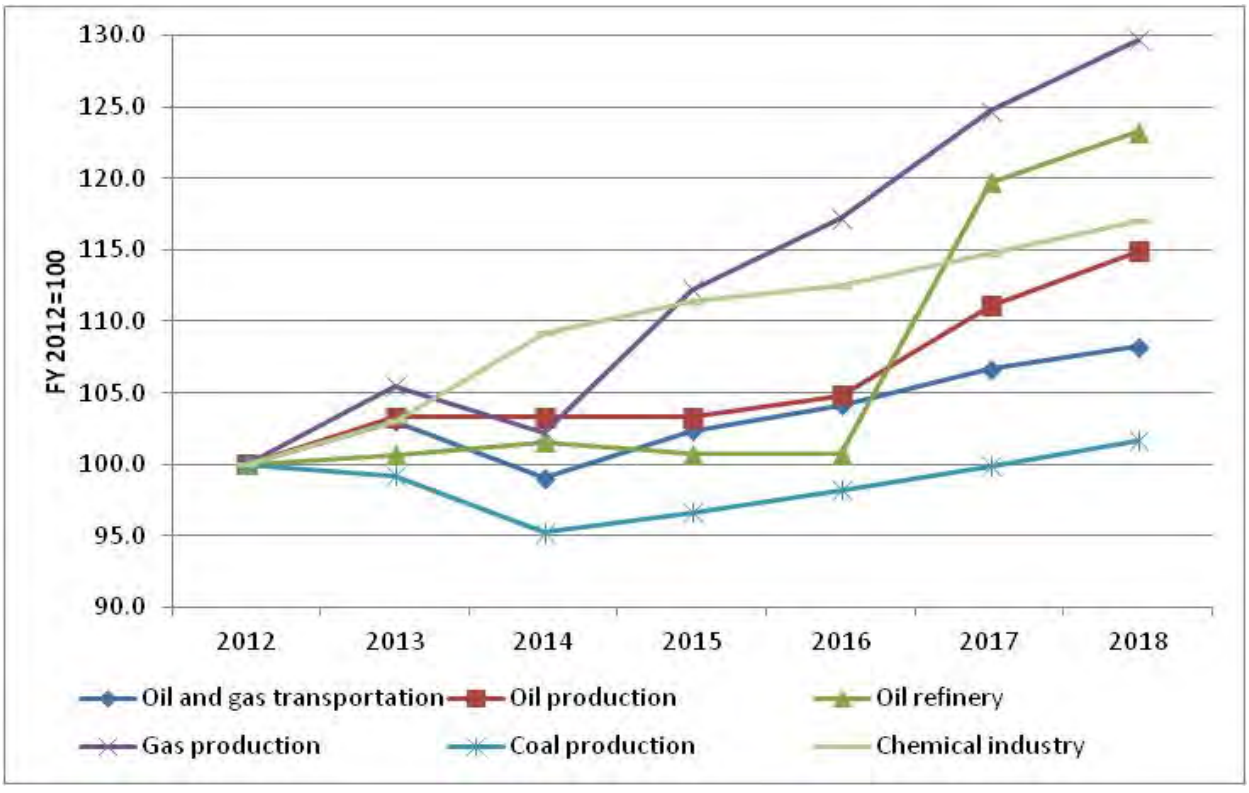
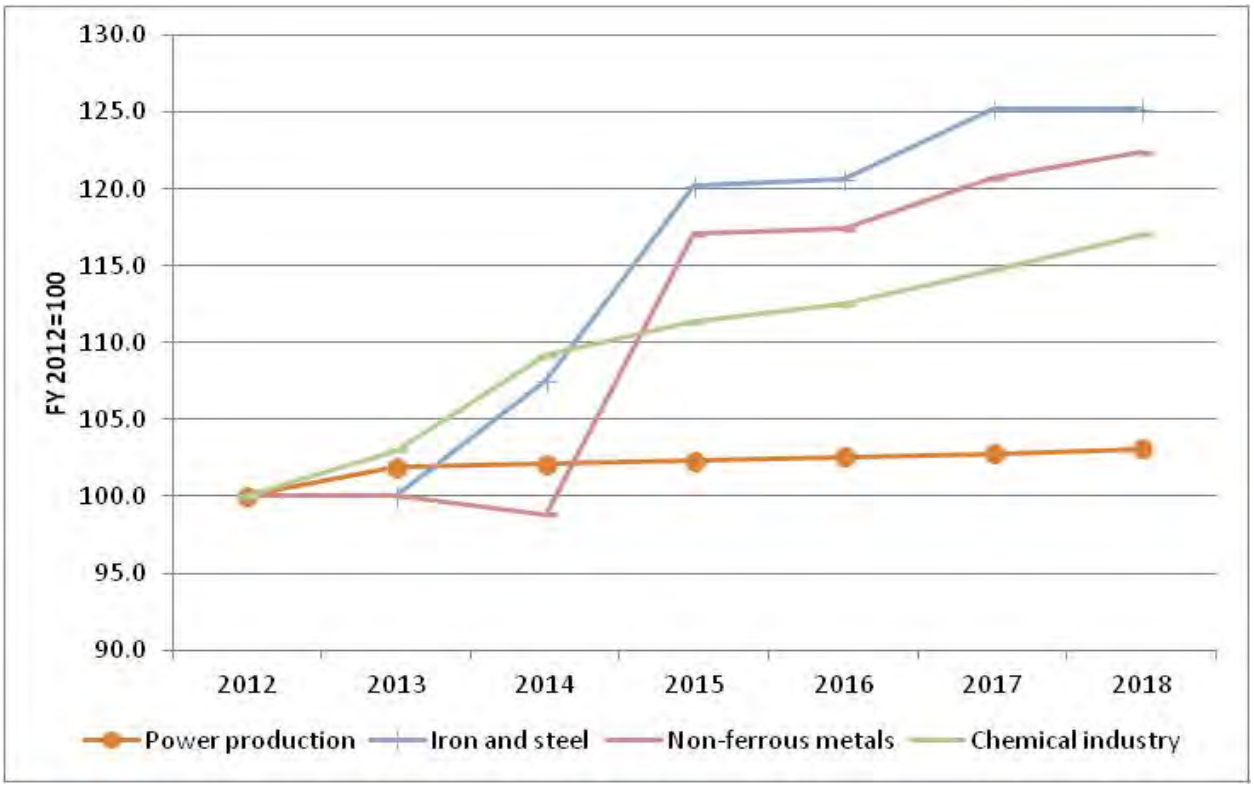
ANNEX V: INDUSTRIAL OUTPUT OUTLOOK OF SECTORS COVERED BY KAZ-ETS







Sources: Calculations based on Strategic Plan of Ministry of Industry and New Technologies 2014-2018 and Strategic Plan of Ministry of Energy 2014-2018

ANNEX VI: KEY INFORMANT INTERVIEW PROTOCOLS

1. GOKZ SAMPLE KII PROTOCOL

The following is *a sample KII protocol* for GoKZ (Ministry of Energy, Zhasyl Damu, other relevant ministries and agencies) interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP.

An *Evaluation Interview Guide* will be finalized once the desk review is completed. This will allow the Evaluation Team to refine the data collection tools for each component area and tailor the questions and elicit details for each activity. The Evaluation Interview Guide and Tools will be presented to USAID/Central Asia at the briefing to solicit feedback and to ensure that data collection is responsive to stakeholders needs. The final Evaluation Interview Guide and Tools will be included in the final report prepared for USAID/Central Asia.

Introduction: Good morning/afternoon and thank you for taking the time to speak with us today. We have been mobilized by USAID to perform the external evaluation after nearly three years of KCCMP implantation. It is a performance evaluation, with the objectives of helping determine what components and project aspects worked well and why, and which did not and why. The purpose of this evaluation is to test primary objectives set in the KCCMP contract. The evaluation will provide pertinent information, statistics, and judgments that assist USAID to learn what has been accomplished. The evaluation results will be used for program improvement to September 30, 2017, gaining continued support from management, assessing replication of program successes and for designing new activities from October 01, 2017. The evaluation is not just looking at any one entity, but rather it covers the entire spectrum of the project, from its design to its implementation, its monitoring and evaluation, and its adaptive management to changing circumstances.

The Evaluation Team is led by Mr. Frank Pool and includes two experts Dr. Almaz Akhmetov and Dr. Zharas Takenov.

Our Evaluation Team has had the opportunity to review many documents provided by USAID to get better understanding of the design and implementation of KCCMP. However, such documents can only tell us so much.

We would like to speak with you today to hear about your experience, in your own words, in order to help us better understand how KCCMP program functions, challenges it faces, and what can be done to improve it. During the KII with your permission we will take notes and photos for analyzing and reporting results to USAID.

Confidentiality Protocol

- Participation in this interview is not required. If you choose not to participate, there will be no penalty for that decision. However, we greatly appreciate your participation so that we can better learn about the KCCMP project and its results.
- SI will not publicly share your personal information, and any quotes resulting from this interview may be included in the evaluation report, but will not link individual names, organizations, or personally identifiable information to those quotes, unless the respondent grants express written consent. Should the team desire to use a particular quote, photograph, or identifiable information in the report, the evaluators will contact the respondent(s) for permission to do so.

GENERAL

Before we begin, could you tell us a bit about your participation with KCCMP?

How would you describe the level and effectiveness of coordination mechanisms between KCCMP and GoKZ?
How do you describe USAID and KCCMP management at engaging in dialogue with the GoKZ?

KCCMP Project Design, Management and Sustainability

QUESTION 1

SUB-QUESTION 1.2

- To your knowledge, did KCCMP consulted government officials during the design of program activities? What influence did that consultation have?
- In your opinion, have the responsibilities and role of your Ministry/Agency been sufficiently explained by KCCMP management prior to project approval and implementation?

KCCMP Project Implementation and Results

QUESTION 2

- Could you tell us about the GoKZ's LES And ETS enforcement capacity prior to KCCMP?
  - How has the enforcement capacity changed as a result of KCCMP's support?
- What are the wider strategic priorities of the GoKZ and what is the place of GHG reduction and EE promotion in those strategic priorities?
- What do you understand to be the goals and objectives of KCCMP? How do you see these goals fitting into the broader goals of GoKZ?
  - Do you think that the Goals and Objectives of KCCMP were sufficiently understood and accepted by the GoKZ and the business community?

SUB-QUESTION 2.1

- Could you tell us about the relevant legislation prior to KCCMP?
  - What were the strengths of the former legislation?
  - What were the weaknesses?
- From your perspective, how has KCCMP interacted with and/or influenced the new laws and regulations? How, if at all, has KCCMP contributed to the national GHG reduction policies?

SUB-QUESTION 2.2

- To your knowledge, did KCCMP consider the strategic plans of other Ministries?
- Where there any conflicts between the new GHG mitigation laws and other laws or strategic plans elsewhere within the government? If yes, what issues have these conflicts caused, and how have they been addressed, or not?

SUB-QUESTION 2.3

- Could you tell us about the policies and administrative guidelines on GHGs that have been issued as a result of the new legislation?
  - To what extent have they been implemented?
  - How effective have they been?
  - What role, if any, has KCCMP played in supporting the guidelines?
- Could you describe the tools to facilitate compliance with LES and ETS policies and guidelines?

SUB-QUESTION 2.4

- Has energy consumption within your agency changed in the last few years? How so? What has contributed to this change?
- From your perspective, what effect, if any, has the KCCMP program had on the energy consumption of government agencies?
  - Why have things changed/why haven't they changed?

SUB-QUESTION 2.5

- Have the newly issued EE/GHG laws and program actions met resistance from the business community?
  - What have been the key issues of contention? How, if at all, have the concerns been addressed?
- We've heard that there has been some resistance to KazET. From your perspective, what are the key drivers of this opposition?
- How have the oppositions to the KAZETS been addressed? Has this been effective? What could be done more in this area?

QUESTION 3

SUB-QUESTION 3.1

- What was the level of GHG emissions in Kazakhstan before the project? What is the level now?
- What does the trend over time look like for GHGs in Kazakhstan? What are the main factors driving that change?
- In your opinion, in what ways might KCCMP influence GHG emission reductions in Kazakhstan?

SUB-QUESTION 3.2

- From your perspective, how transparent and easy is the accreditation process of GHG verifiers and Energy auditors?

QUESTION 4

- Are you familiar with the trainings conducted under KCCMP with GoKZ officials?
  - What worked well regarding the trainings?
  - What didn't work as well?
  - What do you think trainees learned from the trainings?
  - What changes have you seen that might be linked with the trainings?

SUB-QUESTION 4.1

- In what ways was the training designed specifically for the Kazak context? Do you think sufficient efforts were made to adapt the training to the context? What else could have been done?

SUB-QUESTION 4.2

- To what extent has there been staff turnover within relevant government institutions since the start of KCCMP?
  - What impact has this turnover had on the efforts in capacity building?
  - What, if anything, has been done to mitigate this type of risk? What more could be done?

SUB-QUESTION 4.3

- Does the GoKZ intend to continue trainings similar to those provided under KCCMP after the end of the project? How will they be supported after the end of the project?
- How do you think the end of the project might affect the capacity building efforts that are being done? Will any benefits achieved continue after the end of the project?

SUB-QUESTION 4.5

- To what extent have women participated in the capacity building events under KCCMP?
  - What have been women's primary roles within those events?
- How important do you think women's participation in these events is? Why?

QUESTION 5

- To what extent does the GoKZ intend to continue the KCCMP work after the end of the project? Why?
  - If so, how will that effort be financed?
- If any benefits been made through the project, how can those benefits be made sustainable? Who would be responsible for ensure this?
  - What is the role of your Ministry/Agency in achieving this sustainability?

2. INTERVIEW PROTOCOLS FOR USAID OFFICES

The following is *a sample KII protocol* for USAID personnel (USAID Central Asia Economic Development Office, USAID Agreement Officer's Representative, USAID Kazakhstan Country Office) interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP.

An *Evaluation Interview Guide* will be finalized once the desk review is completed. This will allow the Evaluation Team to refine the data collection tools for each component area and tailor the questions and elicit details for each activity. The Evaluation Interview Guide and Tools will be presented to USAID/Central Asia at the briefing to solicit feedback and to ensure that data collection is responsive to stakeholders needs. The final Evaluation Interview Guide and Tools will be included in the final report prepared for USAID/Central Asia.

Introduction: Good morning/afternoon and thank you for taking the time to speak with us today. We have been mobilized by USAID to perform the external evaluation after nearly three years of KCCMP implantation. It is a performance evaluation, with the objectives of helping determine what components and project aspects worked well and why, and which did not and why. The purpose of this evaluation is to test primary objectives set in the KCCMP contract. The evaluation will provide pertinent information, statistics, and judgments that assist USAID to learn what has been accomplished. The evaluation results will be used for program improvement to September 30, 2017, gaining continued support from management, assessing replication of program successes and for designing new activities from October 01, 2017.

The Evaluation Team is led by Mr. Frank Pool and includes two experts Dr. Almaz Akhmetov and Dr. Zharas Takenov.

Our Evaluation Team has had the opportunity to review many documents provided by USAID to get better understanding of the design and implementation of KCCMP. However, such documents can only tell us so much.

We would like to speak with you today to hear about your experience, in your own words, in order to help us better understand how KCCMP program functions, challenges it faces, and what can be done to improve it. During the KII with your permission we will take notes and photos for analyzing and reporting results to USAID.

Confidentiality Protocol

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GENERAL

- **Before we begin, could you tell us a bit about your role within KCCMP?**
- **Do you feel that KCCMP is in close alignment with USAID Central Asia Regional Development Strategy, EC-LEDS program, national policy priorities and the GHG emissions reduction commitments of GoKZ?**
- **Could you tell us about achieved results, completed tasks and activities by KCCMP?**
- **What results, tasks and activities are still remaining? What are the obstacles?**

- **How would you describe the level and effectiveness of coordination mechanisms?**
    - Between USAID/Central Asia and USAID/Kazakhstan
    - USAID and KCCMP?
- **How do you describe USAID and KCCMP management at the following?**
    - Engagement in dialogue with the GoKZ?
    - Identifying potential challenges and obstacles?
    - KCCMP conveying unforeseen risks to USAID?

KCCMP Project Design, Management and Sustainability

RESEARCH QUESTION 1

- Do you know who on behalf of USAID was involved in the design of KCCMP? Who?
- In what ways do you see the original program design having been customized for the Kazakhstan context?
    - Was the customization done adequate? Could more have been done? If so, what more should have been done/what should have been done differently?
- In your opinion, what have been the key factors of the project design that have helped its progress and results?
- What factors have been obstacles to progress and the achievement of results?
    - Is there anything that could be done differently to mitigate these challenges?
- From what you've seen, have there been any unexpected or unintended consequences (either positive and negative) of the project?
    - What, if anything, has been done to mitigate any negative consequences? Is there anything more that could be done?

RESEARCH QUESTION 1.1

- In order to achieve the intended results, programs often make some key assumptions about the surrounding environment or how beneficiaries will react to a program in order to achieve the intended results. In the case of KCCMP, there were two key assumptions identified during project design. Do you believe these assumptions are still relevant? To what extent do they continue to pose risks to the achievement of results?
    - Are there any additional risks that have arisen since the design phase that have proved to be a challenge for the project's ability to achieve results?
        - If so, what is the project team doing to mitigate these risks? What more could be done, if anything?
- Do you think that the initial project assumptions will still be valid after the project's completion?
- How have the recent changes in Kazakhstan (both legislative such as the delay in the ETS coming into force until 2018, and the economic crisis of 2015 that led to a 45 % devaluation in August 2015) affected, or should have affected, the activities of the project?

RESEARCH QUESTION 1.2

- During the design phase, what types of consultations were conducted with other donor organizations, the business community, government officials, NGO and academia representatives during the design of KCCMP's activities?
    - What type of input did these entities have into the actual design of the project? What changes, if any, were made as a result of their participation?
- To what extent did the program utilize Public Private Partnership mechanisms?
    - How well have these mechanisms worked under implementation? Have any modifications been needed? If so, what modifications?

    - Are there any improvements to the process that could be made?
- To what extent has there been equal participation in the project by both men and women?
- In what ways were the specific needs of women incorporated into the project's design? To what extent were those efforts successful?
- Is there anything more that could be done?

RESEARCH QUESTION 1.3

- What are the primary management mechanisms that are in place for the KCCMP project? How effective have they been in keeping the project on track and making progress?
    - What are the strengths about the current management model?
    - Is there anything that could be improved about how the project is managed?

RESEARCH QUESTION 1.4

- What was done during project design in order to assess the project risks? What were the risks identified? Were any key risks missing?
- Could you describe the process of risk identification and management process during the implementation phase to date?
    - To what extent have the identified risks significantly affect the planned outcomes?
    - Have additional risks been identified during the project implementation? If so, what are they?
    - How have these new risks, if any, been addressed by the project teams? Is there more that could be done?
- How would you describe the capacity of KCCMP's management in risk management?
- Have any significant project delays occurred during the project's implementation and what were the reasons behind such delays?
    - How were the delays documented?

KCCMP Project Implementation and Results
RESEARCH QUESTION 5

RESEARCH QUESTION 5.1

- Was any Baseline Report produced as part of the first year PMEP as specified in the project documents?
    - If so, what outcomes did the baseline study focus on? And, could we get a copy of this report?
    - If not, why wasn't one produced?
- Were PMEP plans, reports and monitoring results done on a regular basis as indicated in the project documents?
    - If not, why not?
    - If so, do PMEP reports include problems encountered and do they give proposed remedial actions? If so, have these sections proved useful?

RESEARCH QUESTION 5.2

- In what ways, if any, has the project been modified as a result of changing circumstances?
    - If any, how were the changes conveyed to USAID? And what follow up actions were undertaken by USAID.
- Do you think that there are any additional changes that could or should be made to better adjust to changed circumstances?

- Knowing what you know today, would you make any changes to the design and/or implementation of KCCMP?

RESEARCH QUESTION 5.3

- Could you explain the roles of the contractor and of USAID in terms of operational performance?
- How would you describe the operational performance of the project?
    - What has been working well?
    - What could be improved?

RESEARCH QUESTION 5.5

- Is there currently a sustainability plan for KCCMP? If so, what is that plan?
    - What can be done by KCCMP in order to ensure the sustainability of the project?
    - As you see it, will the project benefits continue after the project's completion?

3. INTERVIEW PROTOCOLS FOR KCCMP MANAGEMENT

The following is *a sample KII protocol* for KCCMP management (COP Alexei Sankovski and DCOP Robyn Camp) interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP. An *Evaluation Interview Guide* will be finalized once the desk review is completed. This will allow the Evaluation Team to refine the data collection tools for each component area and tailor the questions and elicit details for each activity. The Evaluation Interview Guide and Tools will be presented to USAID/Central Asia at the briefing to solicit feedback and to ensure that data collection is responsive to stakeholders needs. The final Evaluation Interview Guide and Tools will be included in the final report prepared for USAID/Central Asia.

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The Evaluation Team is led by Mr. Frank Pool and includes two experts Dr. Almaz Akhmetov and Dr. Zharas Takenov.
Our Evaluation Team has had the opportunity to review many documents provided by USAID to get better understanding of the design and implementation of KCCMP. However, such documents can only tell us so much.
We would like to speak with you today to hear about your experience, in your own words, in order to help us better understand how KCCMP program functions, challenges it faces, and what can be done to improve it. During the KII with your permission we will take notes and photos for analyzing and reporting results to USAID. We suggest conducting 2 interviews. It is suggested that KII#1 will be devoted to management level **KCCMP Project Design, Management and Sustainability** Aspects and **KCCMP Project Implementation and Results. It is suggested that KII #2 will be conducted with KCCMP technical personnel. We expect that each interview will take around 1.5 – 2 hours.**

Confidentiality Protocol

- Participation in this interview is not required. If you choose not to participate, there will be no penalty for that decision. However, we greatly appreciate your participation so that we can better learn about the KCCMP project and its results.
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GENERAL

- **Before we begin, could you tell us a bit about your role within KCCMP?**

- **Could you tell us about achieved results, completed tasks and activities?**
- **What results, tasks and activities are still remaining? What are the obstacles?**
- **How would you describe the level and effectiveness of coordination mechanisms?**
    - Between USAID/Central Asia and USAID/Kazakhstan
    - USAID and KCCMP?
    - KCCMP and GoKZ? How have changes in the GoKZ structure impacted on coordination?
    - Between team members of KCCMP?
    - Between KCCMP and other development partners working on KCCMP activities (local governments, IACs, etc.)
- **How would you describe the level and effectiveness of management in terms of structure, division of responsibilities and reporting?**
- **How do you describe USAID and KCCMP management at the following?**
    - Engagement in dialogue with the GoKZ?
    - Identifying potential challenges and obstacles and options to address them?
    - KCCMP conveying unforeseen risks and mitigation recommendations to USAID?

KCCMP Project Design, Management and Sustainability

RESEARCH QUESTION 1

- Do you know who on behalf of USAID was involved in the design of KCCMP? Who?
- In what ways do you see the original program design having been customized for the Kazakhstan context?
    - Was the customization done adequate? Could more have been done? If so, what more should have been done/what should have been done differently?
- In your opinion, what have been the key factors of the project design that have helped its progress and results?
- What factors have been obstacles to progress and the achievement of results?
    - Is there anything that could be done differently to mitigate these challenges?
- In what ways was gender considerations integrated into the design of the project?
    - How has this impacted women's participation in project activities?
    - What more could be done?
- From what you've seen, have there been any unexpected or unintended consequences (either positive and negative) of the project?
    - What, if anything, has been done to mitigate any negative consequences? Is there anything more that could be done?

RESEARCH QUESTION 1.1

- In order to achieve the intended results, programs often make some key assumptions about the surrounding environment or how beneficiaries will react to a program in order to achieve the intended results. In the case of KCCMP, there were two key assumptions identified during project design. Do you believe these assumptions are still relevant? To what extent do they continue to pose risks to the achievement of results?
    - Are there any additional risks that have arisen since the design phase that have proved to be a challenge for the project's ability to achieve results?
    - If so, what is the project team doing to mitigate these risks? What more could be done, if anything?

- Do you think that the initial project assumptions will still be valid after the project's completion?
- How have the recent changes in Kazakhstan (both legislative such as the delay in the ETS coming into force until 2018, and the economic crisis of 2015 that led to a 45 % devaluation in August 2015) affected, or should have affected, the activities of the project?

RESEARCH QUESTION 1.2

- During the design phase, what types of consultations were conducted with other donor organizations, the business community, government officials, NGO and academia representatives during the design of KCCMP's activities?
    - What type of input did these entities have into the actual design of the project? What changes, if any, were made as a result of their participation?
- To what extent did the program utilize Public Private Partnership mechanisms?
    - How well have these mechanisms worked under implementation? Have any modifications been needed? If so, what modifications?
    - Are there any improvements to the process that could be made?
- To what extent has there been equal participation in the project by both men and women?
- In what ways were the specific needs of women incorporated into the project's design? To what extent were those efforts successful?
    - Is there anything more that could be done?

RESEARCH QUESTION 1.3

- What are the primary management mechanisms that are in place for the KCCMP project? How effective have they been in keeping the project on track and making progress?
    - What are the strengths about the current management model?
    - Is there anything that could be improved about how the project is managed?
- What were the roles of local parties' in project management and decision-making process?

RESEARCH QUESTION 1.4

- What was done during project design in order to assess the project risks? What were the risks identified? Were any key risks missing?
- Could you describe the process of risk identification and management process during the implementation phase to date?
    - To what extents have the identified risks significantly affect the planned outcomes?
    - Have additional risks been identified during the project implementation? If so, what are they?
    - How have these new risks, if any, been addressed by the project teams? Is there more that could be done?
- How would you describe the capacity of KCCMP's management in risk management?
- Have any significant project delays occurred during the project's implementation and what were the reasons behind such delays?
    - How were the delays documented?

KCCMP Project Implementation and Results

RESEARCH QUESTION 2

- Could you tell us about the GoKZ's LES And ETS enforcement capacity prior to KCCMP?
    - How has the enforcement capacity changed as a result of KCCMP's support?
- What are the wider strategic priorities of the GoKZ and what is the place of GHG reduction and EE promotion in those strategic priorities?
- What do you understand to be the goals and objectives of KCCMP? How do you see these goals fitting into the broader goals of GoKZ?
    - Do you think that the Goals and Objectives of KCCMP were sufficiently understood and accepted by the GoKZ and the business community?

RESEARCH QUESTION 2.1

- Could you tell us about the relevant legislation prior to KCCMP?
    - What were the strengths of the former legislation?
    - What were the weaknesses?
- From your perspective, how has KCCMP interacted with and/or influenced the new laws and regulations? How, if at all, has KCCMP contributed to the national GHG reduction policies?
- In what ways did KCCMP facilitate compliance with LES and ETS?
- How effectively were market mechanisms incorporated in the policies and regulations?
    - To what extent was the business community involved?

RESEARCH QUESTION 2.2

- To your knowledge, did KCCMP consider the strategic plans of other Ministries?
- Where there any conflicts between the new GHG mitigation laws and other laws or strategic plans elsewhere within the government? If yes, what issues have these conflicts caused, and how have they been addressed, or not?

RESEARCH QUESTION 2.3

- Could you tell us about the policies and administrative guidelines on GHGs that have been issued as a result of the new legislation?
    - To what extent have they been implemented?
    - How effective have they been?
    - What role, if any, has KCCMP played in supporting the guidelines?
- Could you describe the tools to facilitate compliance with LES and ETS policies and guidelines?

RESEARCH QUESTION 2.4

- Do you have any data regarding any changes in energy consumption by government agencies through the project?
    - If so, could you share that data?
- Does the program include any mechanisms to upscale the pilot projects?
    - Based on what criteria might the pilot projects be scaled up?
    - From your perspective, how effective have the pilot projects been?
        - What have been the strengths?
        - What have been the weaknesses?
        - What could be improved?

RESEARCH QUESTION 2.5

- Have the newly issued EE/GHG laws and program actions met resistance from the business community?
    - What have been the key issues of contention? How, if at all, have the concerns been addressed?
- We've heard that there has been some resistance to KazET. From your perspective, what are the key drivers of this opposition?
- How has the oppositions to the KAZETS been addressed? Has this been effective? What could be done more in this area?

RESEARCH QUESTION 3

- In your opinion, how much capacity is there within the business community to take GHG emission-reducing actions?
    - What strengths are there in terms of capacity?
    - What are the weaknesses?
- How, if at all, has this level of capacity changed over the past 2 years?
    - To what would you attribute these changes?
    - Do you believe KCCMP has played a role in changing the capacity for GHG emission reductions within the business community?
- How did KCCMP's support affect women-owned businesses (either positively and negatively)?

RESEARCH QUESTION 3.1

- Do you know what the current level of GHG emissions is in Kazakhstan? If so, what is it?
    - Are there any documents or evidence about this that you could provide us?
- If you are familiar with the levels, how have they been changing over the course of the past 2 years?
    - What do you think are the main contributors to this change?
    - What role do you think KCCMP has been able to have in influencing GHG emissions in your region? Why?
- From what you have seen, what effect has the LES had on the business community?
    - Has it helped or hindered businesses? In what ways?
    - Is there anything that could be done to improve it?

RESEARCH QUESTION 3.2

- Could you tell us more about tools that could help the business community to achieve energy savings and a least-cost compliance strategy for the KazETS?
    - What kind of feedback have you received regarding these tools?
    - What have people/organizations thought were the key benefits?
    - What have they thought were the key weaknesses?
- How transparent and easy do you think the accreditation process of GHG verifiers, CEMs and Energy auditors is?
    - Is there anything that could be improved?

RESEARCH QUESTION 3.3

- To your knowledge, what, if any, declarations or statements on GHG reduction or energy savings have members of the regional business community made over the last 2 years?
    - Have these commitments been voluntary, or have they been induced by an outside requirement?

- What do you think have been the primary reasons businesses have made these commitments?
- What types of efforts have businesses committed themselves to?
- How large have the declarations/statements been in terms of energy savings or GHG reduction?

RESEARCH QUESTION 3.4

- What was the process of identification and preparation of the pilot energy and GHG projects under KCCMP?
- Could you tell us about the current source of financing and budget of the projects?
- How might they be funded or scaled up in the future? With what funding?
- Did the design incorporate the experiences of other donor organizations?
- If so, how? And what changes were made to the design as a result?

RESEARCH QUESTION 5

- Could you describe the process of risk identification and risk management during the implementation phase to date?
  - What kinds of changes have been made as a result?
  - Could improvements be made to the processes?

RESEARCH QUESTION 5.1

- Was any Baseline Report produced as part of the first year PMEP as specified in the project documents?
  - If so, what outcomes did the baseline study focus on? And, could we get a copy of this report?
  - If not, why wasn't one produced?
- Were PMEP plans, reports and monitoring results done on a regular basis as indicated in the project documents?
  - If not, why not?
  - If so, do PMEP reports include problems encountered and do they give proposed remedial actions? If so, have these sections proved useful?

RESEARCH QUESTION 5.2

- In what ways, if any, has the project been modified as a result of changing circumstances?
  - If any, how were the changes conveyed to USAID? And what follow up actions were undertaken by USAID.
- Do you think that there are any additional changes that could or should be made to better adjust to changed circumstances?
- Knowing what you know today, would you make any changes to the design and/or implementation of KCCMP?

RESEARCH QUESTION 5.3

- Could you explain your role and the role of USAID in terms of operational performance?
- How would you describe the operational performance of the project?
  - What has been working well?
  - What could be improved?

RESEARCH QUESTION 5.4

- Thus far, have the KCCMP activities been modified over time to better respond to feedback and/or changing circumstances?
    - If so, what changes have been made? Have the changes been adequate?
- Is there more that could be done to better adapt KCCMP to changing circumstances?
    - To what extent do you think that the program activities will need to be changed in the future to better adapt to changing circumstances?

RESEARCH QUESTION 5.5

- Is there currently a sustainability plan for KCCMP? If so, what is that plan?
    - What can be done by KCCMP in order to ensure the sustainability of the project?
    - As you see it, will the project benefits continue after the project's completion?
- What will be the primary risks to the sustainability of project benefits? What can be done about those risks?

4. INTERVIEW PROTOCOLS WITH KCCMP OFFICE ON TECHNICAL AND IMPLEMENTATION ISSUES.

The following is *a sample KII protocol* for KCCMP office and technical and implementation experts (Alexey Cherednichenko, Alexander Novoseltsev, Botagoz Khalelova, Yegor Zbrodko and Sergey Maslov) interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP.

An *Evaluation Interview Guide* will be finalized once the desk review is completed. This will allow the Evaluation Team to refine the data collection tools for each component area and tailor the questions and elicit details for each activity. The Evaluation Interview Guide and Tools will be presented to USAID/Central Asia at the briefing to solicit feedback and to ensure that data collection is responsive to stakeholders needs. The final Evaluation Interview Guide and Tools will be included in the final report prepared for USAID/Central Asia.

Introduction: Good morning/afternoon and thank you for taking the time to speak with us today. We have been mobilized by USAID to perform the external evaluation after nearly three years of KCCMP implantation. It is a performance evaluation, with the objectives of helping determine what components and project aspects worked well and why, and which did not and why. The purpose of this evaluation is to test primary objectives set in the KCCMP contract. The evaluation will provide pertinent information, statistics, and judgments that assist USAID to learn what has been accomplished. The evaluation results will be used for program improvement to September 30, 2017, gaining continued support from management, assessing replication of program successes and for designing new activities from October 01, 2017. The evaluation is not just looking at any one entity, but rather it covers the entire spectrum of the project, from its design to its implementation, its monitoring and evaluation, and its adaptive management to changing circumstances.

The Evaluation Team is led by Mr. Frank Pool and includes two experts Dr. Almaz Akhmetov and Dr. Zharas Takenov.

Our Evaluation Team has had the opportunity to review many documents provided by USAID to get better understanding of the design and implementation of KCCMP. However, such documents can only tell us so much.

We would like to speak with you today to hear about your experience, in your own words, in order to help us better understand how KCCMP program functions, challenges it faces, and what can be done to improve it. During the KII with your permission we will take notes and photos for analyzing and reporting results to USAID. . We suggest conducting 2 interviews. KII#1 will be devoted to **KCCMP management for Project Design, Management and Sustainability** Aspects and **KCCMP Project Implementation and Results. KII #2 will be conducted with KCCMP technical personnel. We expect that each interview will be around 1.5 – 2 hours.**

Confidentiality Protocol

- Participation in this interview is not required. If you choose not to participate, there will be no penalty for that decision. However, we greatly appreciate your participation so that we can better learn about the KCCMP project and its results.
- SI will not publicly share your personal information, and any quotes resulting from this interview may be included in the evaluation report, but will not link individual names, organizations, or personally identifiable information to those quotes, unless the respondent grants express written consent. Should the team desire to use a particular quote, photograph, or identifiable information in the report, the evaluators will contact the respondent(s) for permission to do so.

GENERAL

- **Before we begin, could you tell us a bit about your role within KCCMP?**

KCCMP Project Implementation and Results
RESEARCH QUESTION 2.3

- Could you tell us about the policies and administrative guidelines on GHGs that have been issued as a result of the new legislation?
    - To what extent have they been implemented?
- How effective have they been?
- What role, if any, has KCCMP played in supporting the guidelines?
- Could you describe the tools to facilitate compliance with LES and ETS policies and guidelines?

RESEARCH QUESTION 2.5

- Have the newly issued EE/GHG laws and program actions met resistance from the business community?
    - What have been the key issues of contention? How, if at all, have the concerns been addressed?
- We've heard that there has been some resistance to KazET. From your perspective, what are the key drivers of this opposition?
- How have the oppositions to the KAZETS been addressed? Has this been effective? What could be done more in this area?

RESEARCH QUESTION 3

- In your opinion, how much capacity is there within the business community to take GHG emission-reducing actions?
    - What strengths are there in terms of capacity?
    - What are the weaknesses?
- How, if at all, has this level of capacity changed over the past 2 years?
    - What role do you think KCCMP has played in changing the capacity for GHG emission reductions within the business community?
    - What other efforts, outside of KCCMP, have also affected this capacity?

RESEARCH QUESTION 3.1

- Do you know what the current level of GHG emissions is in Kazakhstan? If so, what is it?
    - Are there any documents or evidence about this that you could provide us?
- If you are familiar with the levels, how have they been changing over the course of the past 2 years?
    - What do you think are the main contributors to this change?
    - What role do you think KCCMP has been able to have in influencing GHG emissions in your region? Why?
- What impact do you think the LES has had on the business community?
    - What have been the strengths of the LES?
    - What have been the weaknesses, and what could be improved?

RESEARCH QUESTION 3.2

- Could you tell us more about tools that could help the business community to achieve energy savings and a least-cost compliance strategy for the KazETS?
    - What kind of feedback have you received regarding these tools?
    - What have people/organizations thought were the key benefits?

    - What have they thought were the key weaknesses?
- How transparent and easy do you think the accreditation process of GHG verifiers, CEMs and Energy auditors is?
    - Is there anything that could be improved?

RESEARCH QUESTION 3.3

- To your knowledge, what, if any, declarations or statements on GHG reduction or energy savings have members of the regional business community made over the last 2 years?
    - Have these commitments been voluntary, or have they been induced by an outside requirement?
    - What do you think have been the primary reasons businesses have made these commitments?
    - What types of efforts have businesses committed themselves to?
    - How large have the declarations/statements been in terms of energy savings or GHG reduction?

RESEARCH QUESTION 3.4

- How would you describe the process of identification and preparation of energy and GHG projects?
- How many potential projects have been identified for the pipeline?
- What have been the major challenges to this part of the project?
- Could you explain the reasons behind selecting Karaganda, Pavlodar and Ust-Kamenogorsk to implement pilot projects and establishing IACs?
- How could the experience be up scaled to other parts of the country?

RESEARCH QUESTION 3.5

- What evidence is there about the extent to which the business community has been marketing EE products?
    - Based on the evidence, how has the extent of marketing changed over the past 2 years?

RESEARCH QUESTION 3.6

- What, if any, plan is there to continue the Auditor and Verification Forum [the former Climate Corps] after the end of KCCMP?
    - If there is a plan, what is it?
    - What will be the primary challenges to its continuation after the program's end?

RESEARCH QUESTION 4

- From your perspective, how has the level of professional training of GHG and energy management specialists in Kazakhstan changed over the course of the KCCMP program?
    - In what ways has it changed (and is the change positive or negative)?
    - Is there more that could be improved? If so, what specifically could be improved?
- To what extent have you seen businesses utilizing the services of the experts that were trained through the program?
    - How have the skills learned in the training helped trainees meet the needs of the business community?

RESEARCH QUESTION 4.1

- What efforts were made to adapt your trainings to local context?
    - In what ways was this successful, from your perspective?

    - Is there more that could be done?
- Could you tell us about the challenges encountered, if any, on the design of the trainings?
    - What was done to overcome these challenges?
- How big has demand been for the services of GHG verifiers, CEMs and Energy Experts?
    - Where is there the biggest demand?
    - What are the biggest challenges?

RESEARCH QUESTION 4.2

- Interview question 21. Are there different trainings for government officials, business community and academia? If yes, are they completely different or are they inter-connected?
- Interview question 22. Did you take into account personnel turnover to sustain a sufficient ongoing training capacity?

RESEARCH QUESTION 4.3

- Did you make any changes to the training content when it was provided to different audiences?
    - If so, what types of things were modified?
    - Do you believe you were able to meet the needs of all audiences?
        - Are there additional efforts that could be made to meet the needs of different audiences?
- Did you solicit feedback from participants?
    - If so, what were the findings of that feedback?
    - What, if any, actions were taken in response to participant feedback?

RESEARCH QUESTION 4.4

- To what extent did the KCCMP trainings of GHG specialists also include training on energy management and other related topics?
- Similarly, to what extent did trainings for energy management specialists include topics on GHG emissions and other related topics?
- From your perspective, was the crossover between training topics helpful? Could more have been done? Would less have been better?
- To what extent did the trainings involve topics such as the wider economic impacts of climate change, effects of global climate change, ISO 50001, externality costs, etc?

RESEARCH QUESTION 4.5

- How many female specialists attended the trainings?
- To what extent did they participate during the trainings?
- Has their participation or attendance changed at all over the course of KCCMP implementation?
    - If so, how so?
    - What more could be done to involve and meet the needs of women?

RESEARCH QUESTION 4.6

- How many people attended training workshops and conferences (disaggregated by gender)?
    - What, if any, specific measures were taken to target women's participation in the trainings?
- Have there been any requests for publications or documents regarding the KCCMP program? If yes, how many and by whom?

- Have you created/adopted any new peer reviewed GHG and energy management training materials? If yes, how many?

RESEARCH QUESTION 5.4

- Thus far, have the KCCMP activities been modified over time to better respond to feedback and/or changing circumstances?
    - If so, what changes have been made? Have the changes been adequate?
    - Is there more that could be done to better adapt KCCMP to changing circumstances?
- To what extent do you think that the program activities will need to be changed in the future to better adapt to changing circumstances?

RESEARCH QUESTION 5.5

- From your perspective, what have been the primary benefits of the KCCMP project?
    - What do you think will happen to these benefits after the project ends?
- What are the plans for ensuring the sustainability of KCCMP activities and benefits?
    - What do you think the primary challenges to sustainability will be? What is the plan to address these challenges?
- What could be done now to better ensure that the benefits of KCCMP continue after the end of the project?

5. INTERVIEW PROTOCOLS FOR CENTRAL BUSINESS ASSOCIATIONS

The following is *a sample KII protocol* for Central Business Associations (The National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" and Kazakhstan Electric Association) interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP.

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Our Evaluation Team has had the opportunity to review many documents provided by USAID to get better understanding of the design and implementation of KCCMP. However, such documents can only tell us so much.

We would like to speak with you today to hear about your experience, in your own words, in order to help us better understand how KCCMP program functions, challenges it faces, and what can be done to improve it. During the KII with your permission we will take notes and photos for analyzing and reporting results to USAID.

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GENERAL

- **Before we begin, could you tell us a bit about your role organization?**

- **How have you come to be aware of the KCCMP program and in what ways have you or your organization been involved with the program?**

<u>KCCMP Project Implementation and Results</u>
RESEARCH QUESTION 2

- Are you aware of the existing GHG/LES policies, KazETS?
  - If so, To what extent do they affect your business?
  - What, if any, benefits do you perceive to the policies?
  - What challenges do they pose?
- How important do you believe the services of KCCMP are for the business community? Why?
  - Has anyone every explained to you the goals and objectives of the project?
    - If so, to what extent do you believe that these goals and objectives are important?

RESEARCH QUESTION 2.5

- What are your thoughts about the KazETS?
  - What is good about the KazETS?
  - What are its weaknesses?
  - What could be done to improve it?
- There has been some opposition to the KazETS. What do you think are the reasons behind this opposition?
  - What could be done to lessen the concerns of those who oppose it?

RESEARCH QUESTION 3

- In your opinion, how much capacity is there within the business community to take GHG emission-reducing actions?
  - What strengths are there in terms of capacity?
  - What are the weaknesses?
- How, if at all, has this level of capacity changed over the past 2 years?
  - To what would you attribute these changes?
  - Do you believe KCCMP has played a role in changing the capacity for GHG emission reductions within the business community?
- Are you aware of any national/international mechanisms to help to promote GHG reduction and EE?
  - If so, would you be interested in them? Which ones and why?
- Would you be interested in participating in a relevant carbon market?
  - If not, why? And what measures might change your opinion?
  - If yes, what benefits do you see for the business community?
- From what you've seen, how has KCCMP's support affected women-owned businesses (either positively and negatively)?

RESEARCH QUESTION 3.1

- Do you know what the current level of GHG emissions among the businesses in your area? If so, what is it?
  - Are there any documents or evidence about this that you could provide us?
- If you are familiar with the levels, how have they been changing over the course of the past 2 years?

    - To what would you attribute this change?
    - What role, if any, do you think KCCMP has been able to have in influencing GHG emissions in your region? Why?
- What effect has the LES had on the business community?
    - Has it helped or hindered businesses? In what ways?
    - Is there anything that could be done to improve it?

RESEARCH QUESTION 3.3

- To your knowledge, what, if any, declarations or statements on GHG reduction or energy savings have members of the regional business community made over the last 2 years?
    - Have these commitments been voluntary, or have they been induced by an outside requirement?
    - What do you think have been the primary reasons businesses have made these commitments?
    - What types of efforts have businesses committed themselves to?
    - How large have the declarations/statements been in terms of energy savings or GHG reduction?

RESEARCH QUESTION 3.5

- Are you familiar with the Market Simulation Courses to improve Climate Action Plans within the business community?
    - If you are familiar, how useful do you believe the courses to be? Why?
    - From your perspective, how much interest is there in the community for future offerings of the Market Simulation Courses? Why?
- Are you familiar with the Auditor and Verification forums [the former Climate Corps]?
    - If so, how useful have these forums been? Why?
        - What components have been most helpful? Least helpful?
    - To your knowledge, how much demand is there within the community for similar forums in the future?
    - Do you think it would be possible to continue conducting these forums in the future, even without funding/support from KCCMP? Why/why not?
- Within the business community, how much need is there for the services of energy auditors and GHG verifiers? Why?
    - Do you think that this need will change in the coming years? How so and why?

RESEARCH QUESTION 4

- Could you tell us about KCCMP trainings, conferences and other capacity development events your experts have attended?
    - How effective were they? Why?
        - What were the strengths and weaknesses of the events?
    - Did any women from your organization participate in the events? Why/why not?
        - If women did participate, how did their perceptions of the event differ from other participants?

RESEARCH QUESTION 4.1

- How interested are you or other members of the business community in undertaking an energy audit? Why?

- How likely do you think you would be to implement the resulting energy saving recommendations? Why?

6. INTERVIEW PROTOCOLS FOR EDUCATIONAL AND PROFESSIONAL ORGANIZATIONS

The following is *a sample KII protocol* for Educational and Professional Organizations (IACs and AEE Chapter) interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP.

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GENERAL

- **Before we begin, could you tell us a bit about your organization?**
- **To what extent was your organization involved in KCCMP activities?**
- **To what extent is your organization involved in Energy Audit/Management and KazETS (GHG verification/validation)?**
- **To what extent were you involved in design of trainings?**

KCCMP Project Design, Management and Sustainability
RESEARCH QUESTION 1.2

- To what extent, if at all, were you or your organization consulted on the design stage of KCCMP?
    - Is there more that could have been done? If so, what could have been done?
    - Is there any knowledge, experience, or skills that you would have liked to have offered to KCCMP while they were designing their project, and which could have influenced the project's design? If so, what would this contribution have been?
- After the design was complete, what was the level of consultation and cooperation between KCCMP and your organization, if any?
- To what extent has KCCMP communicated the results of its activities to you?
    - What is your interpretation of their results?
    - To what extent do you agree with their stated results? Why?

KCCMP Project Implementation and Results
RESEARCH QUESTION 3.2

- To what extents have you or your organization participated in the creation of MRV?
    - What role have you played?
    - What have been the biggest successes of the effort?
    - What have been the biggest challenges?
- Are you familiar with the tools that KCCMP produced to help members of the business community track GHG emissions and to implement energy saving and GHG emission-reducing efforts?
    - If so, how useful do you think those tools have been? Why?
- To your knowledge, to what extent has the regional business community utilized these tools and assistance from KCCMP?
    - Why have they/have they not been using the tools?
- Please tell us your view on the level of transparency and ease of accreditation process of GHG verifiers, CEMs and Energy auditors?
    - It what ways is it transparent? What aspects could be improved?

RESEARCH QUESTION 3.6

- Are you familiar with the Auditor and Verification forums [the former Climate Corps]?
    - If so, how useful have these forums been? Why?
        - What components have been most helpful? Least helpful?
    - To your knowledge, how much demand is there within the community for similar forums in the future?
    - Do you think it would be possible to continue conducting these forums in the future, even without funding/support from KCCMP? Why/why not?
- As you see it, what are the remaining needs/gaps for capacity building?
    - What do you think might be the best ways to address them?

RESEARCH QUESTION 4

- Could you tell us about KCCMP trainings, conferences and other capacity development events your experts have attended?
    - How effective were they? Why?
        - What were the strengths and weaknesses of the events?
    - Did any women from your organization participate in the events? Why/why not?
        - If women did participate, how did their perceptions of the event differ from other participants?

RESEARCH QUESTION 4.1

- What efforts were made to adapt your trainings to local context?
    - In what ways was this successful, from your perspective?
    - Is there more that could be done?
- Could you tell us about the challenges encountered, if any, on the design of the trainings?
    - What was done to overcome these challenges?
- How big has demand been for the services of GHG verifiers, CEMs and Energy Experts?
    - Where is there the biggest demand?
    - What are the biggest challenges?

RESEARCH QUESTION 4.2

- Did you make any changes to the training content when it was provided to different audiences?
    - If so, what types of things were modified?
    - Do you believe you were able to meet the needs of all audiences?
        - Are there additional efforts that could be made to meet the needs of different audiences?

RESEARCH QUESTION 4.3

- To what extent did KCCMP trainings adapt their content over time in order to address feedback and better meet changing needs or requirements?
    - What changes were made?
    - What were the obstacles to changing the content?

RESEARCH QUESTION 4.4

- To what extent did the KCCMP trainings of GHG specialists also include training on energy management and other related topics?
- Similarly, to what extent did trainings for energy management specialists include topics on GHG emissions and other related topics?
- From your perspective, was the crossover between training topics helpful? Could more have been done? Would less have been better?
- To what extent did the trainings involve topics such as the wider economic impacts of climate change, effects of global climate change, ISO 50001, externality costs, etc?

RESEARCH QUESTION 4.5

- How many female specialists attended the trainings?
- To what extent did they participate during the trainings?
- Has their participation or attendance changed at all over the course of KCCMP implementation?
    - If so, how so?

- What more could be done to involve and meet the needs of women?

RESEARCH QUESTION 5.4

- Thus far, have the KCCMP activities been modified over time to better respond to feedback and/or changing circumstances?
  - If so, what changes have been made? Have the changes been adequate?
  - Is there more that could be done to better adapt KCCMP to changing circumstances?
- To what extent do you think that the program activities will need to be changed in the future to better adapt to changing circumstances?

RESEARCH QUESTION 5.5

- From your perspective, what have been the primary benefits of the KCCMP project?
  - What do you think will happen to these benefits after the project ends?
- What could be done now to better ensure that the benefits of KCCMP continue after the end of the project?

7. INTERVIEW PROTOCOLS FOR TRAINERS AND GHG/ENERGY SPECIALISTS

The following is *a sample KII protocol* for Trainers (local/international) and GHG/Energy specialists (trainers, individuals from KCCMP website and Kazakh Ecological Group) interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP.

An *Evaluation Interview Guide* will be finalized once the desk review is completed. This will allow the Evaluation Team to refine the data collection tools for each component area and tailor the questions and elicit details for each activity. The Evaluation Interview Guide and Tools will be presented to USAID/Central Asia at the briefing to solicit feedback and to ensure that data collection is responsive to stakeholders needs. The final Evaluation Interview Guide and Tools will be included in the final report prepared for USAID/Central Asia.

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The Evaluation Team is led by Mr. Frank Pool and includes two experts Dr. Almaz Akhmetov and Dr. Zharas Takenov.

Our Evaluation Team has had the opportunity to review many documents provided by USAID to get better understanding of the design and implementation of KCCMP. However, such documents can only tell us so much.

We would like to speak with you today to hear about your experience, in your own words, in order to help us better understand how KCCMP program functions, challenges it faces, and what can be done to improve it. During the KII with your permission we will take notes and photos for analyzing and reporting results to USAID.

Confidentiality Protocol

- Participation in this interview is not required. If you choose not to participate, there will be no penalty for that decision. However, we greatly appreciate your participation so that we can better learn about the KCCMP project and its results.
- SI will not publicly share your personal information, and any quotes resulting from this interview may be included in the evaluation report, but will not link individual names, organizations, or personally identifiable information to those quotes, unless the respondent grants express written consent. Should the team desire to use a particular quote, photograph, or identifiable information in the report, the evaluators will contact the respondent(s) for permission to do so.

GENERAL

- **Before we begin, could you tell us a bit about yourself/your organization?**
- **To what extent was your organization involved in KCCMP activities?**

- **To what extent are you/your organization involved in Energy Audit/Management and KazETS (GHG verification/validation)?**
- **To what extent were you involved in design of trainings (for trainers)?**

KCCMP Project Implementation and Results
RESEARCH QUESTION 2.5

- Have the newly issued EE/GHG laws and program actions met resistance from the business community?
    - If so, who have been the resisters, and what have been their concerns?
    - Have you seen any efforts to address these concerns?
        - If so, what efforts and how helpful have they been?
        - What more could be done?

RESEARCH QUESTION 3

- To what extent are you involved with the business community and their efforts around energy efficiency and GHG reduction?
    - If you are involved, how would you rate their capacity to engage in energy efficiency initiatives?
        - What are their strengths and weaknesses?
        - Has that level of capacity changed at all over the course of the last 2 years?
            - If so, to what do you attribute that change?
            - What role, if any, do you think KCCMP has played in changing their capacity?
- From what you have seen, to what extent are businesses actually implementing efforts to improve energy efficiency or reduce GHG emissions?
    - What types of efforts are they implementing?
    - To what extent might the projects impact energy efficiency or GHG emissions?
    - What are the primary obstacles for businesses to implement meaningful efforts?
        - From your perspective, has KCCMP helped businesses overcome the obstacles that exist?

RESEARCH QUESTION 3.6

- Are you aware of the Auditor and Verification Forum [the former Climate Corps]?
    - How well has it been implemented?
        - What has worked well and what hasn't?
        - What could be improved?
    - Would you be interested in participating in future events through the forum? Why/why not?
- Are there other opportunities you would like to see for supporting energy management specialists?

RESEARCH QUESTION 4

- How would you describe the professional training of GHG and energy management specialists in Kazakhstan prior to KCCMP?
    - Has that changed over the last 2 years? If so, in what ways and why?
    - What role, if any, do you think KCCMP has had in changing the quality of training provided?
        - In what ways has it changed?
        - Is there more that could be done to improve the training offered?
- For trainees: Did you learn any new skills through the KCCMP training? If so, what were they?

    - How would you rate your competence before and after the training?
    - Since completing training under KCCMP, what type of work have you been doing?
        - To what extent have you been using the skills you learned during the training? Why or why not?
- What, if any, skills gaps that remain in Kazakhstan regarding energy efficiency and GHG reduction?

RESEARCH QUESTION 4.1

- Do you think that the design and content of the trainings have been meeting local needs?
    - In what ways has it been meeting local needs?
    - In what ways has it not been meeting local needs?
    - Are there any particular groups for which the design hasn't been as well adapted? If so, for which groups and in what ways hasn't it been meeting their needs?
    - To what extent has the design met the specific needs of women?
- For trainers: What challenges, if any, have been encountered in the design of the trainings?
    - How were the challenges addressed?
- For trainers: How successful have trainees been in finding relevant work after they complete the KCCMP training program?
    - Has there been demand from businesses for the types of skills that KCCMP is teaching? Why or why not?
- For trainees: Since completing training under KCCMP, what type of work have you been doing?
    - To what extent have you been using the skills you learned during the training? Why or why not?
- How big has demand been for the services of GHG verifiers, CEMs and Energy Experts?
    - Where is there the biggest demand?
    - What are the biggest challenges?

RESEARCH QUESTION 4.3

- To what extent did KCCMP trainings adapt their content over time in order to address feedback and better meet changing needs or requirements?
    - What changes were made?
    - What were the obstacles to changing the content?

RESEARCH QUESTION 4.4

- To what extent did the KCCMP trainings of GHG specialists also include training on energy management and other related topics?
- Similarly, to what extent did trainings for energy management specialists include topics on GHG emissions and other related topics?
- From your perspective, was the crossover between training topics helpful? Could more have been done? Would less have been better?
- To what extent did the trainings involve topics such as the wider economic impacts of climate change, effects of global climate change, ISO 50001, externality costs, etc?

RESEARCH QUESTION 4.5

- How many female specialists attended the trainings?
- To what extent did they participate during the trainings?
- Has their participation or attendance changed at all over the course of KCCMP implementation?
    - If so, how so?

- What more could be done to involve and meet the needs of women?

RESEARCH QUESTION 5.4

- Thus far, have the KCCMP activities been modified over time to better respond to feedback and/or changing circumstances?
  - If so, what changes have been made? Have the changes been adequate?
  - Is there more that could be done to better adapt KCCMP to changing circumstances?
- To what extent do you think that the program activities will need to be changed in the future to better adapt to changing circumstances?

RESEARCH QUESTION 5.5

- From your perspective, what have been the primary benefits of the KCCMP project?
  - What do you think will happen to these benefits after the project ends?
- What could be done now to better ensure that the benefits of KCCMP continue after the end of the project?

8. INTERVIEW PROTOCOLS FOR LOCAL GOVERNMENT AND PILOT EMMS PROJECTS

The following is *a sample KII protocol* for Local GoKZ and pilot EMMS projects (Karaganda, Pavlodar and Ust-Kamenogorsk government officials, KGKP "Children's mental hospital", KGU "Regional orphanage for children with development disabilities", KGU "Secondary school №8") interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP.

An *Evaluation Interview Guide* will be finalized once the desk review is completed. This will allow the Evaluation Team to refine the data collection tools for each component area and tailor the questions and elicit details for each activity. The Evaluation Interview Guide and Tools will be presented to USAID/Central Asia at the briefing to solicit feedback and to ensure that data collection is responsive to stakeholders needs. The final Evaluation Interview Guide and Tools will be included in the final report prepared for USAID/Central Asia.

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The Evaluation Team is led by Mr. Frank Pool and includes two experts Dr. Almaz Akhmetov and Dr. Zharas Takenov.

Our Evaluation Team has had the opportunity to review many documents provided by USAID to get better understanding of the design and implementation of KCCMP. However, such documents can only tell us so much.

We would like to speak with you today to hear about your experience, in your own words, in order to help us better understand how KCCMP program functions, challenges it faces, and what can be done to improve it. During the KII with your permission we will take notes and photos for analyzing and reporting results to USAID.

Confidentiality Protocol

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GENERAL

- **Before we begin, could you tell us a bit about your cooperation with KCCMP? Why do you think you were selected to be a pilot project by KCCMP?**
- **Could you tell us about pilot EMMS projects implemented in your region?**

- **How would you describe the level and effectiveness of coordination mechanisms between KCCMP and your organization?**

<u>KCCMP Project Implementation and Results</u>
RESEARCH QUESTION 2.3

- How familiar are you with the new policies and administrative guidelines regarding EE/GHG mitigation issued by regulatory agencies?
    - What do you understand these new regulations to mean for your pilot project?
    - From your perspective, what are the strengths and weaknesses of the regulations?

RESEARCH QUESTION 2.4

- From your perspective, how have government agencies changed their energy consumption over the past 2 years?
    - To what do you attribute this change?
    - What role, if any, do you think KCCMP has played in changing the energy consumption of government agencies?
- To what extent would you be interested in up scaling the pilot projects using donor financing/regional budgets?
    - Why/why not?
    - And, if so, how realistic do you think it would be for you to find additional funding in order to scale up the pilot project? Why/why not?
        - If it is realistic, where might you be getting this funding?

RESEARCH QUESTION 3

- In your opinion, how much capacity is there within the business community to take GHG emission-reducing actions?
    - What strengths are there in terms of capacity?
    - What are the weaknesses?
- How, if at all, has this level of capacity changed over the past 2 years?
    - To what would you attribute these changes?
    - Do you believe KCCMP has played a role in changing the capacity for GHG emission reductions within the business community?

RESEARCH QUESTION 3.1

- Do you know what the current level of GHG emissions is in your region? If so, what is it?
    - Are there any documents or evidence about this that you could provide us?
- If you are familiar with the levels, how have they been changing over the course of the past 2 years?
    - To what would you attribute this change?
    - What role, if any, do you think KCCMP has been able to have in influencing GHG emissions in your region? Why?

RESEARCH QUESTION 3.2

- Are you familiar with the tools that KCCMP produced to help members of the business community track GHG emissions and to implement energy saving and GHG emission-reducing efforts?
    - If so, how useful do you think those tools have been? Why?

- To your knowledge, to what extent has the regional business community utilized these tools and assistance from KCCMP?
    - Why have they/have they not been using the tools?

RESEARCH QUESTION 3.3

- To your knowledge, what, if any, declarations or statements on GHG reduction or energy savings have members of the regional business community made since the project began?
    - How large have the declarations/statements been in terms of energy savings or GHG reduction?

RESEARCH QUESTION 3.4

- To what extent would you be interested in financing EMMS projects?
    - If you are interested in financing EMMS projects, how large of a budget do you think might be available for doing so?

RESEARCH QUESTION 3.5

- Are you familiar with the Market Simulation Courses to improve Climate Action Plans within the business community?
    - If you are familiar, how useful do you believe the courses to be? Why?
    - From your perspective, how much interest is there in the community for future offerings of the Market Simulation Courses? Why?

RESEARCH QUESTION 3.6

- Are you familiar with the Auditor and Verification forums [the former Climate Corps]?
    - If so, how useful have these forums been? Why?
        - What components have been most helpful? Least helpful?
    - To your knowledge, how much demand is there within the community for similar forums in the future?
    - Do you think it would be possible to continue conducting these forums in the future, even without funding/support from KCCMP? Why/why not?
- As you see it, what are the remaining needs/gaps for capacity building?
    - What do you think might be the best ways to address them?

RESEARCH QUESTION 4

- Could you tell us about KCCMP trainings, conferences and other capacity development events your experts have attended?
    - How effective were they? Why?
        - What were the strengths and weaknesses of the events?

RESEARCH QUESTION 4.1

- How well do you think the training events were adapted to local needs?
    - Is there anything more that could have been done to better meet local needs?

RESEARCH QUESTION 4.2

- How well did the trainings target your specific needs?

RESEARCH QUESTION 4.3

- Have you seen any changes being made to the trainings over time in response to feedback from participants or in response a changing environment?
    - If so, what kinds of changes were made, and were they beneficial?
    - Are there any additional changes that could be made? If so, what are they?

RESEARCH QUESTION 4.4

- To what extent did trainings involve related topics such as energy management or GHG?
    - How well were these topics covered? Was it helpful?

RESEARCH QUESTION 4.5

- From what you've seen, how frequently have women participated in the trainings?
- How active has their participation been?
    - Are there particular ways or components of the training that they participated the most? If so, which?
    - How did men react to women who actively participated?
- Has the frequency or level of participation by women changed over time? If so, how and why?
- What more could be done to encourage participation by women?

RESEARCH QUESTION 4.6

- In your opinion, how helpful were the contents of trainings in achieving your plans? Why?
    - What were the strengths and weaknesses?
    - What could be improved?

9. INTERVIEW PROTOCOLS FOR DONOR AGENCIES AND INTERNATIONAL ORGANIZATIONS

The following is *a sample KII protocol* for Donor agencies and international organizations (GIZ, EBRD, World Bank, Embassy of Germany, Embassy of Norway, American Chamber of Commerce in Kazakhstan, UNDP/GEF) interviews only. This is a guide tool for the evaluation team. As not all respondents will have the same level of knowledge with KCCMP, respondents will be based on their role within KCCMP.

An *Evaluation Interview Guide* will be finalized once the desk review is completed. This will allow the Evaluation Team to refine the data collection tools for each component area and tailor the questions and elicit details for each activity. The Evaluation Interview Guide and Tools will be presented to USAID/Central Asia at the briefing to solicit feedback and to ensure that data collection is responsive to stakeholders needs. The final Evaluation Interview Guide and Tools will be included in the final report prepared for USAID/Central Asia.

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GENERAL

- **Before we begin, could you tell us a bit about your organization's activities related to energy efficiency and GHG reduction in Kazakhstan?**
- **To what extent were you aware of KCCMP activities?**

KCCMP Project Implementation and Results
RESEARCH QUESTION 1.2

- To what extent, if at all, were you or your organization consulted on the design stage of KCCMP?
    - Is there more that could have been done? If so, what could have been done?
    - Is there any knowledge, experience, or skills that you would have liked to have offered to KCCMP while they were designing their project, and which could have influenced the project's design? If so, what would this contribution have been?
    - What, if any, efforts were made to incorporate the specific needs of women into the project?
- After the design was complete, what was the level of consultation and cooperation between KCCMP and your organization, if any?
- To what extent has KCCMP communicated the results of its activities to you?
    - What is your interpretation of their results?
    - To what extent do you agree with their stated results? Why?

RESEARCH QUESTION 3

- In your opinion, how much capacity is there within the business community to take GHG emission-reducing actions?
    - What strengths are there in terms of capacity?
    - What are the weaknesses?
- How, if at all, has this level of capacity changed over the past 2 years?
    - To what would you attribute these changes?
    - Do you believe KCCMP has played a role in changing the capacity for GHG emission reductions within the business community?

RESEARCH QUESTION 3.4

- Does your organization have experience with energy and resource efficiency projects?
    - If so, please describe that experience
    - Did your organization participate in KCCMP's effort to build a pipeline of potential efficiency projects?
        - If so, please describe your experience through the project.
            - What worked well?
            - What could have been improved?
- What, if any, outreach was there by KCCMP to your organization regarding your experience with efficiency programs?

RESEARCH QUESTION 4

- How would you describe the current quality of Professional Training of GHG and energy management specialists in Kazakhstan?
    - What are the strengths of the available training?
    - What are the weaknesses?
    - What could be done to improve the available training?
- From your perspective, has the quality of the available Professional Training changed at all (for the better or for the worse) over the past 2 years?
    - If so, what changes have occurred? Are things getting better or worse, and how so?
    - What are the key obstacles to improvement?

- If there have been changes, what do you think has been contributing/causing the changes?
- What role, if any, do you believe KCCMP has played in changing the quality of professional training?

RESEARCH QUESTION 4.1

- If you are familiar with the content of the available professional training offered through KCCMP, how well do you think the training is addressing the needs of Kazakhstan specifically?
  - Are there aspects of the Kazakhstan context that aren't being addressed through the training?
    - If so, what are they?
    - How could the training program be improved to better meet local needs?
- To what extent has your organization utilized GHG verifiers, CEMs and Energy Experts in your projects or activities?
  - Why/why not?
  - If you did use these types of experts, were the individuals you used trained through the KCCMP program?
  - What if any benefit do you think there would be to using experts that were trained through KCCMP vs other experts? Why?

RESEARCH QUESTION 5.5

- To what extent and in what ways do you see GHG emissions changing in Kazakhstan?
  - What are the main contributors to that change, from your perspective?
- What are your perceptions of the new LES and GHG laws?
  - What are the strengths of the new laws?
  - What are the weaknesses?
  - From your experience, how well have the laws been implemented?
    - What has been done well?
    - What could be done better?
  - To what extent do you think that these news laws might be able to contribute to energy saving and GHG reducing projects in Kazakhstan?
- From your perspective, what, if any, have been the benefits of the KCCMP project?
  - How, if at all, have those benefits impacted your organization?
  - If there are benefits to the program, what do you think will happen to those benefits once the project formally ends?

ANNEX VII: STATEMENT OF DIFFERENCE FROM THE IMPLEMENTING PARTNER (TETRATECH) AND SOCIAL IMPACT'S RESPONSE

The following table was received from TetraTech for inclusion with the final version of the report as a Statement of Difference. Social Impact's response has been included below.

#	Statement in the Report (quote, Page #)	Alternative View	Tetra Tech Comment
1	**Pages 92 and 20** Based on tentative evidence from KCCMP, the pilot projects appear to be having an effect on heat use, which has gone down since the beginning of the project. However, interviews with the recipient organizations highlight that they are not largely concerned with heat savings, but rather cost savings, for which the results have been more mixed. Of the eight pilot projects spoken with, three did not yet have sufficient information to determine if they would realize energy savings or not. Of the remaining five, two reported cost savings, while the other three did not. In many cases, secondary problems were preventing the organizations from achieving cost savings, including poorly planned installations, unevenly heated buildings, antiquated internal heating systems, and inefficient windows and wall insulation. In some cases, pilot recipients indicated needing to use space heaters to ensure sufficient heat in some areas of their buildings. Concerns were raised regarding the economic justifiability of the pilot projects. Without the financial support of KCCMP, it is likely that the projects would not be considered good financial investments for the targeted	According to already provided direct measurement results the total energy savings from 9 facilities combined were equal to **1545** GCal and **8,389,117** Tenge. Both energy and financial savings were achieved in 8 out of nine pilot buildings. One building where no savings were achieved in comparison with the base year is administrative building in Ust-Kamenogorsk, where the automated heating sub-station (installed under the pilot project in 2016) was not properly managed. This mismanagement has been detected and corrected – it is expected that the building will achieve savings over the 2016-2017 heating season. Based on KCCMP financial model the automated heating substations have an average payback of no longer than 7 years in most public buildings. Three pilot projects are being considered for long-term investor management under PPP mechanism.	The statement in the Evaluation Report needs to be corrected to reflect results of direct measurement of heat and cost savings.

	entities.		

Social Impact's Response:

In response to the feedback provided by TetraTech, the evaluation team has modified the report to incorporate both the heat usage and cost savings data that were provided by TetraTech. Also incorporated were electricity usage data, which were provided later. As such, the final report wording does not match exactly with the text copied in TetraTech's statement (to the left), which was based on a prior version of the report, before all data were provided to the evaluation team.

These data, which indicate savings in heat usage and costs, have been documented and acknowledged in the report. With a caveat regarding outside influences on the data, the final report also incorporates the data provided by TetraTech regarding electricity usage.

Though access was requested, the evaluation team was not provided with TetraTech's financial models, so no assessment of the referenced model and comparison to the perspectives of interviewees was possible. However, the final report acknowledges the model cited by TetraTech, but also acknowledges that some interviewees expressed significant concerns regarding the financial justifiability of future EMMS systems, particularly for public entities. Without project financing, it was unclear that additional public entities would move forward with their own EMMS systems based on the KCCMP model, which is a central facet to the research question posed in the evaluation. Based on the triangulation of all available data, the evaluation team stands by the findings, conclusions, and recommendations documented in the final report.