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ENHANCING CAPACITY FOR LOW EMISSION DEVELOPMENT STRATEGIES/EC-LEDS CLEAN ENERGY PROGRAM

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ANNUAL PROGRESS REPORT

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Acronyms

BAU	Business as usual
BEO	Bureau Environmental Officer
BREEAM	Building Research Establishment Environmental Assessment Method
CA	Condominium Associations
CE	Categorical exclusion
COM	Covenant of Mayors
DCA	Development Credit Authority
DWG	Decision Ware Group
EA	Environmental assessment
EC	European Commissions
EC-LEDS	Enhancing Capacity for Low Emission Development Strategies
EE	Energy efficiency
EEC	Energy Efficiency Center
EIPMP	Emission Inventory, Projection, and Mitigation Planning
EMMP	Environmental Monitoring and Mitigation Plan
EPI	Economic Prosperity Initiative
ERN	European Regional Network
EWG	Expert Working Group
FFC	Fast Forward Communications
GB	Green building
GBCWG	Green Building Certification Working Group
GBCG	Green Building Council Georgia
GDP	Gross Domestic Product
GeMunee	Georgian Municipal Energy Efficiency
GHG	Greenhouse gases
GOG	Government of Georgia
HPEP	Hydropower Policy and Energy Planning
ICMA	International Capital Market Association
IEE	Initial Environmental Examination
INRMW	Integrated Natural Resource Management in Watersheds of Georgia
LED	Low emission development
LEDS	Low Emission Development Strategy(ies)
MDF	Municipal Development Fund
MENRP	Ministry of Environment and Natural Resources Protection
MOE	Ministry of Energy
MOE-AD	Ministry of Energy Analytical Department
MRV	Monitoring, Reporting and Verification
Muni-EIPMP	Municipal Inventory, Projection and Mitigation Planning
NAMA	Nationally Appropriate Mitigation Actions
NATELI	New Applied Technology Efficiency and Lighting Initiative
NDC	Nationally Determined Contribution
NEO	New Economic Opportunities
NGO(s)	Non-Governmental Organization(s)
PEA	Programmatic Environmental Assessment
PMP	Performance Monitoring Plan
PPP	Public private partnerships

PWD	People with Disabilities
RE	Renewable energy
RFA	Request for Applications
RFP	Request for Proposals
RS	Rating systems
RSERC	Regional Sustainable Energy Resource Centers
SC	Steering Committee
SDAP-Center	Sustainable Development and Policy Center
SEAP	Sustainable Energy Action Plan
SEO	Sustainable Energy Office
SS	Scoping statement
SUDeP	Sustainable Urban Demonstration Projects
SWG	Sub working group
TOR	Terms of Reference
UN	United Nations
USAID	United States Agency for International Development
USG	United States Government

I. EXECUTIVE SUMMARY

The United States Agency for International Development (USAID) Georgia's Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) Clean Energy Program is a four-year (October 2013 – September 2017) effort focusing on three activities: 1) Georgian Municipal Energy Efficiency (GeMunee); 2) Green Building (GB) Rating and Certification System; and 3) National EC-LEDS Working Group and Advisory Assistance. Winrock International has been granted a cooperative agreement to implement the EC-LEDS Clean Energy Program for Georgia to support increased climate change mitigation by building municipal capacity in climate change mitigation measures and raising public awareness; increasing private sector investment in energy efficiency (EE) and green buildings (GB); and strengthening Government of Georgia (GOG) capacity to develop and implement a national Low Emission Development Strategy (LEDS). This report represents the first year annual report for the EC-LEDS Clean Energy Program covering the period of October 28, 2013 through September 30, 2014.

Key Achievements (Qualitative Impact)

The EC-LEDS Clean Energy Program, funded by USAID/Caucasus, supports Georgia's efforts to increase climate change mitigation through energy efficiency and clean energy. The broader goal is to enable more responsible management and development of Georgia's natural endowments. The objectives of the program are to support Georgian municipalities in institutionalizing and implementing climate change mitigation measures, promoting and facilitating private sector investment in energy efficiency and green buildings, and building the capacity of the GOG to develop and implement a national Low Emission Development Strategy in support of the United States Government (USG) EC-LEDS initiative.

During the four years, the EC-LEDS Clean Energy Program is expected to reduce greenhouse gas (GHG) emissions in Georgia by at least 236,372.9 metric tons of CO₂ equivalent, facilitate up to \$14 million in private sector investments in clean energy, and lead to energy savings of up to 315 GWh (the equivalent of approximately \$22 million).

Component I: Georgian Municipal Energy Efficiency (GeMunee)

In Year I, EC-LEDS focused on the development of the Covenant of Mayors (COM) Sustainable Energy Action Plans (SEAPs) for the top priority municipalities of Batumi, Kutaisi and Zugdidi, developing and testing the Municipal Inventory, Projection and Mitigation Planning (muni-EIPMP) analytical tool to be used for developing SEAPs, including developing an approach to Monitoring, Reporting and Verification (MRV) planning and communications.

During Year I, EC-LEDS tested and improved the Muni-EIPMP tool and harmonized data and results from the tool with the national MARKAL Georgia model. Training on development and management of data for use with the tool was postponed until the end of Quarter 4 due to local elections. This training was preceded by a high level one-day overview of SEAPs for Mayors, Vice Mayors, Governors and national Ministry representatives. Muni-EIPMP was used in developing and updating SEAPs with draft SEAPs for Kutaisi, and Zugdidi and an amended Batumi SEAP submitted to the municipalities in Quarter 4 for approval by the municipal councils. An MRV framework and MRV plan for Tbilisi (not included in the initially submitted SEAP) was prepared in Quarter 4.

Identifying potential locations for Sustainable Energy Offices (SEOs) or Regional Sustainable Energy Resource Centers (RSERCs) will be postponed until Year 2 since the related legal issues cannot be analyzed until the normative acts and bylaws for implementing the new local government legislation

have been enacted by Parliament. A Terms of Reference (TOR) for legal review of the new legislation and its impact on developing SEOS was completed in Year I.

A Grants Manual was submitted to USAID for approval in Quarter 4. After this approval, EC-LEDS will issue RFAs for partial grants to support projects in SEAP municipalities. Additional funds for SEAP projects were identified and documented in an Assessment Report also submitted in Quarter 4. Since USAID has not yet developed a Development Credit Authority (DCA) program, no assistance has yet been provided to financial institutions in support of a DCA, and no DCA funds are yet available to support SEAP projects.

Each year, COM Municipalities host Energy Days in the month of June. In Georgia, the Energy Efficiency Center organizes these events in cooperation with Municipalities. EC-LEDS participated in several Energy Days events in Telavi, Gori, Tbilisi, Zugdidi and Poti. In addition, a pilot communications campaign was held in Tbilisi and Batumi, to reach 250,000 people with messages promoting the benefits of energy efficiency.

Component 2: Green Building Rating and Certification System

The EC-LEDS program is tasked with recommending, developing, and implementing a voluntary Green Building (GB) rating system in Georgia. During Year I, two reports were prepared which guided decisions about the approach to green building certification in Georgia. An initial assessment report documented the existing situation with green buildings in Georgia and made initial recommendations for an approach in Georgia to certifying buildings and conducting Monitoring, Reporting and Verification (MRV). A second report included recommendations for supporting certification of buildings according to requirements of existing international rating systems and energy performance labeling programs, i.e. Leadership in Energy and Environmental Design rating system developed by the US Green Building Council (LEED USA) and the UK's Building Research Establishment Environmental Assessment Method (BREEAM) rating systems, as well as the Display energy performance labeling program recognized by the COM. A decision was also made to develop a Georgia-specific rating system focused on existing buildings. The recommendations in both reports were discussed and agreed with the Green Building Certification Working Group (GBCWG).

EC-LEDS also focused on developing a marketing strategy for promoting certification of buildings per the criteria required by GB rating systems and energy performance labeling programs. In Quarter 4, EC-LEDS prepared to deliver a train-the-trainer event focused on LEED and BREEAM. This training will provide trainees foundational information necessary to prepare for the LEED on-line exams within several months of completing the training.

The Government of Georgia (GOG) continues to move forward with the process of developing policies related to green and energy efficient buildings, beginning with the drafting of a new framework Construction Code, expected to be submitted to Parliament before the end of 2014.

Component 3: National EC-LEDS Working Group and Advisory Assistance

The bilateral EC-LEDS initiative provides a strategic framework for the GOG to articulate concrete actions, policies, and programs that slow the growth of emissions while advancing economic growth and meeting Georgia's development objectives. Representatives of the U.S. Government, including USAID, and the GOG (from various ministries) formed a LEADS Committee to achieve the goals and actions agreed upon by both countries in the Memorandum of Understanding signed on December 17, 2012. Winrock participates in the LEADS Committee and is working to ensure that assistance activities are linked with national priorities, and that data, findings, and results at the municipal level are used to inform national actions, policies, and programs.

Initial activities in Year I focused on capacity-building and meeting key LEDS Steering Committee (SC) members and their Expert Working Group (EWG) members to share the significance of LEDS and the assistance available from the EC-LEDS program. In Quarter 4, the energy BAU projections, the source data for each sector and potential mitigation options were presented and discussed with the LEDS Committee Expert Working Group (EWG) and several sub-working groups (SWGs).

Managing the LEDS process, including organizing meetings of the EWG and SC, and assigning LEDS analysis and policy formulation to various LEDS sub-working groups (SWGs), is a significant and complex task. Therefore, the Ministry of Environment requested a LEDS advisor to coordinate the process. The Advisor met with SWG chairs to share a Terms of Reference (TOR) for developing the LEDS.

EC-LEDS collaborated with the Ministry of Energy's Analytical Department (MOE-AD) and the Hydropower and Energy Planning (HPEP) program to update the MARKAL Georgia model. EC-LEDS added functionality to enable analysis of non-energy emissions, and data from the EC-LEDS municipal baseline survey was incorporated into the MARKAL model. Additional expertise is required to develop data on non-energy mitigation options' GHG emissions reductions and costs for analysis using MARKAL Georgia.

It is clear that other donor funds will be required to fully support the GOG in developing the LEDS. In preparation for a donor meeting to discuss funding needs for completing the LEDS, EC-LEDS a matrix summarizing all donor-funded programs relevant to the LEDS process was compiled.

Environmental Protection Activities

EC-LEDS received comments from USAID on the Environmental Monitoring Scoping Statement (SS) submitted in Quarter 2 and responded to the USAID BEO comments in Quarter 4. The SS defines the scope of program, and the significance of the issues and likely effects to be addressed under the Programmatic environmental Assessment (PEA).

Implementation of the PEA began in Quarter 3, with data collection and analyses of additional baseline information necessary for development of the PEA. The draft PEA was submitted to USAID in Quarter 4.

Cross-Cutting Activities

Public Communications and Outreach

In order to reach EC-LEDS Clean Energy Program goals and build a clear understanding of the benefits of clean energy, energy efficiency technologies and green buildings and tools for their implementation, the program incorporates public outreach activities across all components.

Outreach and Communications goals include reaching 1 million Georgian citizens with core messages, leading to energy and money-saving actions by at least 100,000 people; increasing citizen awareness that energy saving measures improve comfort in buildings and houses and reduce costs while decreasing GHG emissions and creating a positive image for EC-LEDS. The outreach efforts will also raise awareness of green building rating systems and benefits, targeted to households, private sector businesses and investors, and construction and development companies.

In Quarters 3 and 4, the EC-LEDS Clean Energy Program submitted to USAID the Public Awareness and Communications Strategy and elaborated a pilot communications plan that was

implemented in Tbilisi and Batumi. A baseline survey of Knowledge, Attitudes and Behaviors (KAB) for the 10 municipalities was completed in Quarter 3. Based on the results of the pilot communications and outreach and the baseline survey, the National Communications Plan was finalized in Quarter 4.

People with Disabilities (PWD), Youth and Gender

During Year I, EC-LEDS met Gender, Youth, and PWD NGOs active in the Kakheti region, local media representatives and the Telavi Municipality PR Unit, and an introductory meeting with NGOs. EC-LEDS also attended the first official joint meeting of the Disabled Women association organized by the NGO Woman and Reality. The meeting was dedicated to the discussions of the problems related to the integration of PWD into a normal lifestyle. Activities in development during Year I, for implementation in Year 2, include inclusion of youth in development and implementation of SEAPs, and hiring disabled women for data collection to support the SEAPs.

The National Communications Campaign addresses the issues of gender, youth and people with disabilities in its outreach efforts. The plan includes producing specific promotional and educational materials people with disabilities using sign language for deaf and dumb and Braille for blind children and adults.

Cooperation with Other USAID Programs

EC-LEDS collaborated with the Hydropower and Energy Planning (HPEP) program in conducting household surveys, in making changes to the MARKAL Georgia model, and in developing the energy sector Reference/BAU scenario. Coordination with the USAID Regional EC-LEDS program and HPEP enabled building on the capacity-building already conducted for the Ministry of Energy's Analytical Department and previous analysis completed for the Ministry of Energy on mitigation scenarios.

Opportunities for collaboration in public outreach, analytical methods and project implementation in the waste, environmental, and agricultural processing sectors were explored with the Integrated Natural Resource Management in Watersheds of Georgia (INRMW) program, the Waste Management Technologies in Regions program, and the New Economic Opportunities (NEO) program.

Cooperation with Other Donors

During Year I of the EC-LEDS program, EC-LEDS cooperated with EU's Inogate and Clima East programs and with GIZ in leveraging technical assistance available for LEDES, including Inogate's expert facility for possible support of a National Energy Efficiency in housing plan, Clima East to provide urban development/climate change and industrial climate mitigation experts, and GIZ for developing forestry non-energy mitigation options.

Local Partner Capacity-Building

Local partner capacity-building is a key element of the EC-LEDS program, and Winrock is committed to building partners' capacity to work directly with USAID. Training and capacity-building provided during year I, including training workshops and on-the-job capacity-building, contributed to local partners' successful implementation of program activities. One-day trainings for EC-LEDS Local Partners were provided on Internal Controls Strengthening and Leadership, People Management and Meeting Facilitation Skills. Short workshops were provided on Branding and Marketing and developing cost share information. Work also began on finalizing a short list of for conducting an Organizational Capacity Assessment.

Program Progress (Quantitative Impact)

The annual Year I targets for most of the indicators were met. The indicators for which targets were not met include OC1, OC2, OC3, OC4 and OP20. The annual targets for OC1 Number of individuals with increased economic benefits, OC2 Quantity of greenhouse gas emissions, OC3 Energy saved due to energy efficiency/conservation, and OC4 Number of private sector clean energy investments were not met due to the impact of local elections on municipalities' committing their own budgets..

The annual target OP 20 Number of Financial Institutions Trained for EE, RE and Green Building indicator was also not met because USAID has not yet developed its DCA program as was envisioned in the project scope of work.

Project Administration

Constraints and Critical Issues

During Year I, the local government elections, held in June (with runoffs in July), impacted program implementation, causing some delays, as outlined in Work Plan changes, shared with and approved by USAID.

For Component I support to municipalities on SEAPS, the remaining six municipalities to be assisted in Years 2 and 3 may change due to staffing changes in municipalities as a result of elections and the impacts of the newly enacted local government legislation. A second round of interviews with local governments will be held in Year 2, to verify the municipality priorities for Year 2.

The completion of the LEDS BAU was delayed as it was dependent on finalization of the reference scenario, which was developed through assistance from the HPEP program. The delay in finalizing the BAU has also delayed consideration and analysis of the alternative scenarios. This could delay completion of the national LEDS.

Personnel

In Year I, the EC LEDS program hired a Monitoring and Evaluation Specialist and a LEDS Advisor and engaged an International Outreach Consultant, an International LEDS Consultant, an environmental expert and a private financing consultant.

Cooperative Agreement Modifications and Amendments

During Year I, Winrock's EC-LEDS agreement was modified three times: to obligate more funding; an administrative modification to authorize payment by letter of credit; and a request for budget realignment to reflect a revised approach to Component 2 with an associated reduction of resources shifted to Component 3 work.

Lessons Learned

The process of organizing and preparing to develop a LEDS at the National level has taken more time than envisioned. The LEDS Advisor will be critical in helping to manage the LEDS process, and in linking the technical assistance available under EC-LEDS to the LEDS Ministries' decision-making processes. However, it has become clear that sectorial experts will also be needed to assist the Ministries. The impact of local elections demonstrated that flexibility is required to ensure the

process of developing and implementing SEAPS, including commitments of municipal budgets for SEAP projects.

Year 2 Work Plan

The work plan for Year 2 was submitted to USAID on September 15, 2014, the revised date approved by the AO on June 10th. EC-LEDS is currently awaiting feedback from USAID on the proposed work plan.

II. KEY ACHIEVEMENTS (Qualitative Impact)

The EC-LEDS Clean Energy Program, funded by USAID/Caucasus, is a four-year program implemented by Winrock International to support Georgia's efforts to increase climate change mitigation through energy efficiency and clean energy. The broader goal is to enable more responsible management and development of Georgia's natural endowments. The objectives of the program are to:

- Support Georgian municipalities in institutionalizing and implementing climate change mitigation measures;
- Promote and facilitate private-sector investments in energy efficiency and green buildings; and
- Build the capacity of the GOG to develop and implement a national Low Emissions Development Strategy in support of the U.S. Government EC-LEDS initiative.

Components 1 and 2 will be implemented throughout the four years and Component 3 will be completed by the end of the third year.

During the four years of the program, the EC-LEDS Clean Energy Program is expected to reduce GHG emissions in Georgia by at least 236,372.9 metric tons of CO₂ equivalent, facilitate up to \$14 million in private sector investments in clean energy, and lead to energy savings of up to 315 GWh (the equivalent of approximately \$22 million).

Component I: Georgian Municipal Energy Efficiency (GeMunee)

In 2008, the EU launched the COM to endorse and support local governments in implementing sustainable energy policies. Cities and local authorities that want to join or become signatories to the COM must follow certain steps and take certain actions. For example, signatories must create an inventory to quantify GHG emissions, develop a Sustainable Energy Action Plan (SEAP), and establish a Sustainable Energy Office or regional Sustainable Energy Resource Center, among other things. Eight cities are currently signatories in Georgia—Batumi, Gori, Kutaisi, Poti, Rustavi, Tbilisi, Zugdidi and Telavi (joined in late summer 2014). The first city to become a signatory in Georgia, Tbilisi, developed and submitted its SEAP in 2011 and established a Sustainable Energy Agency with assistance from USAID.

The EC-LEDS Clean Energy Program, through the GeMunee component, will build on USAID's support for Tbilisi and expand assistance to at least nine other municipalities to enable their participation in the COM, including those that are already signatories. Assistance will be limited to those municipalities that are not receiving assistance for similar activities from other donors.

Assistance to the ten municipalities will include:

Development and implementation of SEAPs;
 Establishment of Sustainable Energy Offices or Regional Sustainable Energy Resource Centers;
 Development of Monitoring/Reporting/Verification Plans;
 Development of Sustainable Energy Public Awareness Plans;
 Identification and implementation of Demonstration Projects via Partial Grants; and
 Development Credit Authority Guarantees and Financial Institution Assistance.

In Year I, EC-LEDS focused on identifying the 10 potential municipalities to assist in developing and implementing SEAPS, developing the analytical tool to be used for developing SEAPS, and developing an approach to Monitoring, Reporting and Verification (MRV) for approval by the COM.

Sustainable Energy Action Plans (SEAPS)

Selection of priority municipalities and Development of SEAPS

In January 2014, EC-LEDS representatives visited 15 municipalities and used the municipality evaluation criteria approved by USAID under the ECLEDS Year I Work Plan to evaluate and prioritize municipalities. Municipalities were assessed according to the criteria below:

	Selection Criteria	Weight of criteria
1	CoM Signatory city/municipality or strong intention to join COM	10
2	Projected increase in GHG emissions because of economic or population growth	7
3	Willingness of a municipality to address emissions through facilitation and implementation of energy efficiency improvements	8
4	Willingness of a municipality to cooperate with the EC-LEDS	This criterion is used a filter. If the municipality does not express willingness to cooperate with the EC-LEDS program, it is automatically excluded.
5	Willingness of the municipality to contribute with human resources	9
6	Annual expenditure in a municipality for infrastructure improvements or construction	10
7	Total population within the municipality	5
8	Annual energy consumption in municipality (if known)	4

Using a multi-criteria analysis based on the evaluation criteria above, Batumi received the highest score, followed by Kutaisi, Gori, Tbilisi, Poti, Rustavi and Zugdidi. All seven of these cities are signatories to the Covenant of Mayors (COM), having signed in different years beginning in 2010. Batumi and Kutaisi postponed their deadlines for SEAP submissions to the COM Secretariat until 2014. Based on the assessment, and meetings with Batumi and Kutaisi, these two cities were selected as top priority cities to receive technical assistance for SEAPS under the EC-LEDS Clean Energy Program in 2014.

Gori, Tbilisi, Poti, Rustavi and Zugdidi were all considered for the third municipality to be assisted during Year I. Tbilisi, Gori and Rustavi had already submitted SEAPS to the EU. Zugdidi was chosen over Poti since their SEAP submission deadline to the COM secretariat was earlier than Poti's SEAP submission date. In addition to Batumi and Kutaisi, Zugdidi also had an obligation to submit their first SEAP prior to September 30, 2014 and Tbilisi was required to submit their MRV report which was long overdue. Because both Kutaisi and Zugdidi were behind schedule in preparing their SEAPS, EC-LEDS decided to produce three SEAPs in year one for Batumi, Kutaisi and Zugdidi, and to produce the Monitoring, Reporting and Verification report (MRV) for the city of Tbilisi which had overrun the deadline for the MRV report submission that was due in 2011. The delay had been due to the

fact that the COM had not yet issued its MRV guidelines which were to be issued in 2010. Since the date of COM issuing MRV guidelines was not known, EC-LEDS through its partner Remissia developed an MRV framework to use in developing the MRV plans for the SEAPs (note: the COM issued its MRV guidelines in September 2014).

Batumi: Work on SEAPS began with Batumi. Local experts were identified to update building and transport sector sections of Batumi's SEAP, with the intention to submit an amended SEAP to the COM. Experts had conducted analysis for Batumi's Transport Sector and Urban Planning and Development Strategy, both completed by the end of March. Beginning in April, meetings were held in Batumi with local experts to review the process of updating the SEAP, and updated the building and transport sector SEAP sections.

Kutaisi: Kutaisi's SEAP began in April with the engagement of an expert to conduct the Kutaisi transport inventory using COPERT software, and consultants were hired to assist Kutaisi in conducting analysis of their building, waste, transportation and tourism sectors. The Kutaisi sectoral experts then conducted analysis of the building, greening, public lighting, and transport and waste sectors and drafted sections of the SEAP. The building sector experts visited Kutaisi and conducted energy audits of several "typical" buildings as one step in establishing the baseline inventory for the Kutaisi buildings sector. An expert hired in May began a document review and consolidation of all data into one master document. Another expert began preparation of guidelines for transport sector mitigation options, including urban planning for transport. BAU projections were developed for the public lighting and transport sectors using the MUNI-EIPMP tool. The public awareness section and MRV plan for the SEAP were drafted and submitted to Kutaisi municipality for review and comment, with the SEAP finalized in Quarter 4 and submitted to the municipality for approval.

Zugdidi: The development of Zugdidi's SEAP began in May with an assessment of the current situation and gathering data. Technical experts in the fields of buildings, green spaces, waste, transport and public lighting, developed the inventory and conducting analysis of mitigation options for the Zugdidi SEAP. Inception reports were drafted by local experts. Zugdidi's SEAP report was finalized in Quarter 4 and submitted to the municipality for approval.

Finalization of these documents required intensive work with sectorial experts, online communication and consultations with the focal points in respective Municipalities to confirm and clarify the details as well as editing and formatting of the documents. The Kutaisi SEAP was translated into English at the end of Year I, while Zugdidi and updated sections of Batumi SEAP will be translated in Year Two.

The EC-LEDS team also worked with these three municipalities on elaboration of project proposals for SEAP projects prioritized by the municipalities. Kutaisi's project proposal was focused on production of waste biomass briquettes and their utilization within the municipal buildings (kindergardens) of Kutaisi. The Batumi project proposal was focused on awareness raising on new technologies for the tourism sector. Zugdidi's project proposal was focused on upgrading the heating and cooling supply system using heat-pump technology in the municipal administrative building. Additional project concepts focused on the waste, green spaces and buildings sectors.

Development of Muni-EIPMP Analytical Tool

The Long-Term Energy Alternative Planning (LEAP) tool used for Tbilisi's SEAP, the first to use a BAU approach, is complex and beyond the capabilities of most municipalities. As a response, the JRC developed a different, though less accurate, approach. EC-LEDS thus decided to develop a simple inventory and projection tool for municipalities which draws information from national MARKAL-Georgia model. This tool can be successfully used by municipalities, but is comprehensive enough to provide planners the insights they require. The approach ensures that actions and decisions taken at the national level will be properly incorporated in the municipal SEAPs, and that the cumulative influence of actions by the municipalities are properly accounted for in the national context.

In January 2014, work began on the development of the Municipal Inventory, Projection and Mitigation Planning (Muni-EIPMP) tool. The team defined the tool modules and began working on the first module, data gathering and inventory. Testing and improving the tool was conducted with city of Kutaisi staff, followed by the city of Batumi. In March the Public Lighting and Transport modules were developed and tested. The first short demonstration version of the Muni-EIPMP tool, including base year inventory and public lighting sectors, was reviewed.

EC-LEDS also assessed the ability to harmonize data and results from the Muni-EIPMP tool with the national MARKAL Georgia model. Development of the transport sector inventory and Business-As-Usual (BAU) modules and testing data for Batumi, Kutaisi and Zugdidi continued throughout Quarters 2 and 3.

At the end of Quarter 4, the first official version of Muni-EIPMP tool was finalized and presented to the municipalities at a workshop held in Batumi. The tool includes functionality for data gathering, greenhouse gas (GHG) inventory preparation and Business-As-Usual (BAU) projections for transport, buildings and public lightings sectors. The tool is bi-lingual – all contents are both in English and Georgian. In the fourth quarter the tool was used to prepare emission inventories and BAU projections for the Zugdidi SEAP and the updated Batumi SEAP.

Develop and conduct workshops and on-the-job training on SEAP development and monitoring

In August 2014, EC-LEDS conducted an introductory meeting in Anaklia, Zugdidi Municipality, to introduce draft SEAPS to newly elected local authorities of Batumi, Kutaisi and Zugdidi. Representatives of four municipalities (Batumi, Kutaisi, Poti and Zugdidi) were invited. The local experts who were directly involved in the preparation of SEAP documents of respective cities participated in the meeting. Data gathering processes and barriers were also discussed and exchanged among the participants. As the result of the meeting, municipality staff members and high-level decision-makers became more aware of how the SEAPS were prepared and their required involvement in implementing the SEAPs. The participants expressed their readiness and willingness to further support the SEAP process.

The EC-LEDs team had planned to hold the first training for municipalities, focused on data collection and management, in April 2014. However, this training was postponed twice, primarily due to local government elections throughout Georgia, initially planned for April, and then postponed to June, with run-offs in many areas in July. A three-day training workshop was finally held in September 2014 in Batumi. An Executive level workshop was attended by the senior level representatives from 10 Municipalities including the Mayors, Deputy Mayors, Governors, Deputy Governors, Heads of City Councils, Deputy Ministers and Heads of Departments from the Ministry of Energy, Ministry of Economy and Sustainable Development, the Ministry of Environment, and GeoStat.

The first day of the training workshop was dedicated to the introduction of COM principles and presenting the EC-LEDS mandate, along with sharing information related to ongoing climate change related programs and challenges related to existing. The second and third days of the workshop were dedicated to discussions and exchanging information on the SEAP data gathering process among the 67 participants, as well as presenting the analytical tool muni-EIPMP, main principles of monitoring, reporting and verification (MRV) and other important issues related to SEAP preparation.

Establishment of Sustainable Energy Offices or Regional Sustainable Energy Resource Centers

In Quarter 4, EC-LEDS completed desktop research to assess factors affecting Sustainable Energy Offices (SEOs) established in European Union (EU) cities and analyzed the potential for establishment of SEOs in Georgia based on this experience. The research identified that the concept of SEOs or other such institutions is not widespread in Europe. Within the framework of the research, no concrete examples of SEOs were found in any of the European countries.

Therefore, EC-LEDS analyzed energy service providers with similar institutional formats and functions, such as Energy Service Companies (ESCOs) and Energy Agencies (EA) existing in different European countries, synthesized relevant experience and lessons learned and elaborated recommendations for a potential energy efficiency provider with the most suitable legal and institutional format in the Georgian context.

As a next step, the EC-LEDS team will assess the legal and financial foundation for establishing SEOs or Regional Sustainable Energy Resource Centers (RSERCs). Parliament recently passed legislation separating Cities from the rural areas of municipalities. The team drafted a terms of reference to analyze the legal foundation for the municipalities to establish SEOS or RSERCs in the COM signatory cities and a local legal firm will review the legislation and its effect on the 10 partner municipalities, and based on the review, will propose a legal structure for SEOs or RSERCs.

Development of Monitoring/Reporting/Verification Plans

In Year I, EC-LEDS planned to assist Tbilisi in monitoring the implementation of their SEAP, which was due in 2011. The delay in its submission was due to the fact that the COM had not issued its Monitoring, Reporting and Verification (MRV) guidelines, due in 2010. Because there were no guidelines, the EC-LEDS team developed an MRV framework and protocols to use in developing the SEAP MRVs in place of the missing COM ones.

The team had planned to submit these protocols to the COM for approval by the end of September 2014, but then the COM Joint Research Center (JRC) finally issued its guidelines in September 2014.. Ultimately the EC-LEDS team finalized the MRV Framework and Methodology, along with an MR Plan for Tbilisi. It considers general principles as a framework and provides a methodology and approach for monitoring of SEAP implementation, including relevant sectors and parameters, and provides potential structures for allocating responsibility for the monitoring and reporting within municipalities.

Development of Sustainable Energy Public Awareness Plans

As part of the SEAP process, EC-LEDS is assisting municipalities in drafting their communications strategies to be included in their SEAPs. In Year I, communications strategies were developed for Kutaisi and Zugdidi's SEAPS. Batumi had already included a communications strategy in their initial SEAP.

Each year, COM Municipalities host Energy Days in the month of June. In Georgia, the Energy Efficiency Center organizes these events in cooperation with Municipalities. In Year I, EC-LEDS participated in several Energy Days events including in Telavi, Gori and Tbilisi. In Telavi, winners of a school contest on environmental problems and solutions presented their projects and EC-LEDS shared information on energy efficiency. At Gori Energy Days EC-LEDS provided an overview of the program and of SEAPs, and shared brochures about various energy efficiency technologies. This was followed by presentations prepared by Gori school pupils. At the Tbilisi Energy Days Energy Efficiency Conference, EC-LEDS participated in a panel discussion of Tbilisi's SEAP and presented the Mardaleishvili Medical Centre's construction process as a success story of energy efficiency in the construction sector based on recommendations from the NATELI program.

In September 2014, EC-LEDS held a two-day awareness raising campaign in Batumi entitled “Energy Efficiency Is A Smart Choice”. It was focused on raising awareness of Batumi citizens and Batumi visitors on the advantages of sustainable energy consumption and the advantages of energy efficient technologies (e.g. energy efficiency of buildings, insulation of buildings, waste management, etc.) to promote sustainable tourism and development in Batumi. The program included a competition/quiz for Batumi residents and visitors and a street art performance on the wall of Batumi Port at the entrance of Batumi.

Identification and Implementation of Demonstration Projects via Partial Grants

The EC-LEDS program includes the task of identifying and implementing demonstration projects via partial grants to support implementation of municipal SEAPs. This includes selecting projects to receive partial grants (at least 10 projects) and identifying funding for at least another 10 projects. As part of the SEAP development process, the municipalities identified municipal infrastructure or other projects and programs to implement the SEAPs. The EC-LEDS team held meetings with the municipalities, met with potential project funders, and assisted municipalities in seeking funding for specific projects.

During Year I, EC-LEDS assisted the municipalities in fleshing out the project concepts in order to provide more definition for the projects. Project concepts were developed for a heat pump for the Zugdidi City Hall Administration Building and for building awareness of energy efficiency technologies in Batumi’s tourism sector, among others.

During a July-August 2014 trip to west Georgia, the EC-LEDS team presented information on the upcoming grants program to the representatives of municipalities and discussed opportunities for financing SEAP projects from various sources including the E5P mechanism, IFIs and donors. EC-LEDS developed a Grants Manual and Request for Applications (RFA) template that was submitted to USAID for approval in Quarter 4.

As mentioned above, EC-LEDS is assisting the municipalities to identify funds to leverage the grants as well as to fully or partially fund additional projects. In March 2014, EC-LEDS assisted five local NGOs (in partnership with municipalities) in preparing and submitting concept notes for submission to the European Commission’s (EC) SUDeP program. Two concept notes were selected for the SUDeP shortlist. The first was NGO Remissia’s concept note for a 1.5 million Euros project focused on waste and wastewater methane collection in Batumi. The second was NGO Sustainable Development and Policy Center’s (SDAP) concept note for a 648,990 Euro project focused on energy efficiency retrofitting of three Kindergartens in Rustavi. These organizations developed and submitted full proposals to the EC in August 2014. The EC-LEDS team assisted the applicants in developing the full proposals during Quarter 4.

To identify additional funding sources for projects, EC-LEDS assessed funds available from other donors and financial institutions, and hired a private financing consultant to identify private companies potentially interested in investing in mitigation projects. To facilitate matches between the municipal climate change mitigation projects and financing sources, EC-LEDS identified opportunities within municipal budgets, with other USAID projects, and with the Georgia Municipal Development Fund, E5P, commercial banks, multilateral donors, international finance institutions (IFIs) as summarized in the Financing Assessment Report submitted in Year I. EC-LEDS also completed an inventory and prioritization of major local and international companies that are potential candidates for participating in PPPs or committing corporate social responsibility funds for mitigation projects. Trade and commercial associations were proposed as points of entry for discussions with these companies.

Development Credit Authority Guarantees and Financial Institution Assistance

In Year I, the EC-LEDS team did not pursue Development Credit Authority (DCA) activities, including training for financial institutions, because USAID put the program on hold

Component 2: Green Building Rating and Certification System

Development of a Voluntary System for Rating and Certifying Green Buildings

Review existing GB certification systems

The EC-LEDS program is tasked with recommending, developing, and implementing a voluntary GB rating system in Georgia. During the first quarter, Dr. John Williams of the Alliance to Save Energy conducted an assessment of energy efficiency in buildings and green buildings in Georgia. This assessment documented the current status of building energy efficiency (EE) and green buildings (GB) in Georgia and the market for EE and GB. The report provides a short overview of the six most widespread Green Building certification and rating systems of the world. The building stock and construction activities of Georgia are reviewed, with approximate state of buildings' thermal performance and the future market for EE and GB in Georgia. Recommendations for promoting green and energy efficient buildings include developing a Georgia-specific energy performance labeling program and promoting the BREEAM and LEED rating systems initially.

In Quarter 2, EC-LEDS supported representatives of the GOG (Head of the Spatial Planning and Construction Policy Department under the Ministry of Economy and Sustainable Development), together with the CEO of the Green Building Council of Georgia (GBC Georgia) to attend the third International Green Building (GB) Conference held in Istanbul, Turkey. This is an annual event, hosted this year by the Turkish Green Building Council and the World Green Building Council's European Regional Network (ERN), and it was preceded by the first meeting of the European Network of GB Councils. In addition, the World Green Building Council supported two additional participants to join the delegation.

In addition to attending the plenary sessions, meetings were conducted with the Vice Chair of World Green Building Council (World GBC) and CEO of the UK GBC, the Manager of World GBC Membership and representatives of the World GBC's European Regional Network (ERN), the CEOs of the Romanian, Russian and Turkish Green Building Councils (GBCs), and with several members of the Turkish GBC Board. During the meeting of the ERN, the GBC Georgia agreed to join the Common Education Platform of the World Green Building Council which is led by the ERN. Membership in this network will allow GBG Georgia to use the ERN's already developed curricula for providing GB training activities in Georgia.

Convene Building Certification Working Group meetings

EC-LEDS organized a Green Building Certification Working Group (GBCWG) to obtain stakeholder input during the development and implementation of the GB certification program. The first meeting of the GBCWG, held in Quarter I, addressed issues of EE in construction and GB certification and rating schemes worldwide, their criteria, and a comparison of GB certification schemes. At the same time, the Georgian company Wood Service presented its work covering EE and GB projects, and the GBCG presented its work on GB in Georgia.

The second meeting of the GBCWG was conducted in Quarter 3 at the New Technology Center, a green building demonstration site (though not independently certified). The main objective of the meeting was to select the rating systems (RS) for further application in Georgia and to discuss methods of training and accrediting professionals to conduct the certifications according to the RS chosen. The meeting was attended by stakeholders from different fields and organizations, including

government representatives from the Ministry of Energy and Ministry of Economy and Sustainable Development; Municipality representatives from the cities of Tbilisi, Rustavi, Gori and Telavi; academic professors from Georgia Technical University faculties of Energy and Telecommunication, Architecture and Building and Construction; NGOs working on landscape architecture, urban development, energy and environmental issues; and private companies including developers, construction companies, real estate companies.

The agenda of the GBCWG meeting was structured to present the international experience in green buildings and energy performance rating and certification and to compare various internationally recognized schemes for these two practices, their advantages and drawbacks for the Georgian conditions including acceptability by the community of experts and government, relevance and applicability construction traditions, flexibility to adapt to Georgian conditions, resources necessary to adapt, etc. Local participants, in turn, presented ongoing legal-regulatory developments, information on technical capacities, needs and envisioned trainings in the field of green and energy efficient buildings, as well as GB activities to date in Georgia.

The follow-up to the GBCWG meetings from Year I included finalizing recommendations for EC-LEDS support and marketing and outreach to the private sector about GB and energy performance labeling programs. A report was completed in Year I that summarized international experience in building energy performance labeling and green building certification, and made recommendations for Georgia.

Develop preliminary version of GB certification system for Georgia

Based on the GBCWG meetings, a decision was made to promote certification of buildings based on the criteria of the LEED and BREEAM rating systems and Display energy performance labeling program, an EU program implemented through Energy Cities. The reason for focusing on these existing systems is so that certifications can begin immediately and Georgian experts can gain experience with certifying buildings before developing any Georgia-specific system.

Lessons learned from certifying buildings using LEED and BREEAM will form the foundation for a Georgia-specific rating system, which will focus on existing buildings. Because LEED and BREEAM are very focused on US and UK requirements, respectively, finalization of a Georgia-specific system will depend on decisions to be made by the European Green Building Councils that are members of the World GBC's European Regional Network (ERN). Driven mainly by the interest of funding organizations, the ERN is currently considering the development of one common rating system focused on CO₂ reductions only, eliminating all of the existing rating systems currently in use in Europe.

Establish/strengthen GB certification and accreditation entity(ies) and obtain national authorization

As the first step in increasing the professional skills and enlarging the pool of experts in Georgia who can certify green buildings for existing rating systems (BREEAM and LEED) and for the Display energy performance labeling program, EC-LEDS held a train-the-trainer event at the end of Year I, focused on LEED and BREEAM. Training for auditors to offer certification for the Display Energy performance labeling program will also be developed in Year 2.

Development of a certification and accreditation program in Georgia will only begin once a Georgia-specific system has been developed and an approach to certifying and accrediting buildings to the Georgia-specific standard is finalized.

Hold workshops on GB standards, rating, certification and accreditation system particularly for private sector groups

During Quarter 4, EC-LEDS met members of eight stakeholders groups, including professionals (Architects and Engineers), developers, construction companies, academia, financial institutions, real estate companies and building owners, NGOs, and Government representatives. The purpose was to present general information on the importance of certifying green and energy efficient buildings, and to share information on the plan to support LEED and BREEAM rating systems and the Display energy performance labeling program certifications.

Development of Promotional Strategy and Campaign

In parallel to holding the stakeholder meetings, EC-LEDS developed a marketing strategy for promoting GB and energy performance labeling certification, based on the World GB Council approach. This strategy focuses on determining the target market for the rating systems and energy performance labeling programs and targeted outreach to these organizations. A Marketing Action Plan, to be developed in Year 2, will flesh out this strategy.

Development of Monitoring/Reporting/Verification Plan

The GB Assessment report proposed a framework approach to developing Monitoring, Reporting and Verification (MRV) Plans for certified buildings. This approach will be fleshed out during year 2 and MRV plans developed for buildings to be certified under the EC-LEDS program.

Government Incentives and Regulations Supporting EE and GB

The Government of Georgia continues to move forward with the process of developing policies related to green and energy efficient buildings. The Ministry of Economy and Sustainable Development's Office of Spatial Planning and Construction Policy is developing the Spatial Planning and Construction code (the Code), which is still in process. The draft version of the Code has gone through several public hearings and will be submitted to the Parliament of Georgia for review and adoption later in 2014. The framework legislation, officially called "The Spatial Planning and Construction Code", was reviewed in detail EC-LEDS provided language on green buildings to supplement the language already incorporated on energy efficiency. This legislation sets a timeline for developing building codes, including a mandatory energy performance building code.

Revisions of the building and construction codes has already begun ahead of the passage of the framework legislation (Spatial Planning and Construction Code) above, with initial efforts focused primarily on safety. While European standards were used for Georgia's structural code, the Ministry is now focusing on non-structural issues, beginning with mechanical and plumbing requirements, then energy performance, followed by green codes, based on the International Building Council (IBC) family of codes. IBC provides minimum requirements useful for Architects, and can be easily adapted to the situation in Georgia to provide a common standard for construction.

In order to promote greater involvement of experts in Government policy-making, the Faculty of Architecture, Urbanism and Design of the Georgian Technical University is sponsoring an International Conference on the "Problems of Architecture and Town Planning Today" in July, 2014 that focused on increasing the involvement of Architects and Town Planners in Government planning. EC-LEDS reprised experts' presentations given at the June 2014 GBCWG meeting on green and energy efficient buildings that were relevant for this conference.

Component 3: National EC-LEDS Working Group and Advisory Assistance

The bilateral EC-LEDS initiative provides a strategic framework for the GOG to articulate concrete actions, policies, and programs that slow the growth of emissions while advancing economic growth and meeting Georgia's development objectives. This framework will provide a foundation for achieving long-term, measurable greenhouse gas (GHG) emission reductions, as compared to a Business-As-Usual (BAU) development pathway, and for improving environmental management in Georgia. Representatives of the U.S. Government, including USAID, and the GOG (from various ministries) formed a Low Emission Development Strategy (LEDS) Committee to achieve the goals and actions agreed upon by both countries in the Memorandum of Understanding signed on December 17, 2012.

EC-LEDS participates in the LEDS Committee and plays a critical role in making sure that assistance activities are linked with national priorities, and that data, findings, and results at the municipal level are used to inform national actions, policies, and programs. This will include providing advisory assistance to the GOG as needed. Areas for bilateral cooperation and assistance may include activities that increase and encourage the use of clean and energy efficient resources; support the development of a national GHG inventory system; improve the policy environment in low emissions economic growth; expand economy-wide and technical modeling efforts; and improve governance of Georgia's natural resources.

Ensure SEAP Activities are Consistent with National Policies and Priorities

As the MARKAL Georgia model is used to project the Business-as-Usual (BAU) national energy emissions, these projections will form the foundation for finalizing the BAU projections for the municipalities using the muni-EIPMP tool. In Year I, emission factors from MARKAL Georgia were incorporated into the muni-EIPMP tool.

Ensure that Municipal-level Data, Findings and Results Inform National Policies, Programs and Actions

In Quarter 4, data collected through the national household end-use survey (HPEP) and the municipal end-use survey (EC-LEDS) were incorporated into the MARKAL Georgia model. In order to link SEAP strategies to the National LEDS, a presentation was made to the Chairs of the sectorial sub-working groups (SWGs) and the Ministry of Energy's Analytical Department (named the LEDS "Planning Team") on the mitigation measures incorporated into the SEAPS and their relevance for the National LEDS.

Analytical capacity-building

Prior to the EC-LEDS project, significant capacity-building has been provided by USAID to the Ministry of Energy for analyzing energy sector strategies and evaluating emissions impacts of those plans, using MARKAL-Georgia as an analytical tool. However, low-emissions concepts, approaches, technologies and analytical approaches are new for most of the other Ministries involved in LEDS. Also, assistance will be required to develop the BAUs outside of the MARKAL Georgia model and develop data on mitigation options for the Forestry, Agriculture and Waste Management sectors. EC-LEDS will provide some assistance, complemented by other donors and expertise provided by the Ministry of Environment.

During Quarter 1, EC-LEDS presented an overview of the program at the first EC-LEDS SC meeting in October 2013. Meetings were held subsequently with the Ministry of Environment's Climate

Change office to agree on critical assumptions and to identify priorities for supporting the LEDS Committee. At these meetings, the three focus areas of the EC-LEDS program were reiterated, the specific assistance to be provided by the EC-LEDS program to the LEDS Committee was reviewed, and key issues were clarified. The plans for the sectorial SWGs were discussed, and EC-LEDS provided input on the groups' organization, focus areas, and planned leadership. Most of the SWGs are managed by the relevant responsible Ministries.

In Quarter 2, EC-LEDS met with the key LEDS Ministries, as well as Geostat (the GoG's national statistics agency) to present an overview of LEDS and its relevance for the Ministries' areas of responsibility, and to secure their commitment to participate in the process. Presentations included the benefits of developing a multi-sectorial LEDS, and its potential impact on economic growth and attracting funding for projects. The meetings solidified the Ministries' participation in the LEDS Steering Committee and Expert Working Group (EWG), and leadership of the assigned SWGs. All Ministries agreed to identify one liaison for the EWG (even if more than one individual from the Ministry is assigned to the EWG) and to serve as the leader of the relevant sectorial SWG.

In response to a Ministry of Environment and Natural Resources Protection (MENRP) request, EC-LEDS recruited and is supporting a Georgian LEDS Advisor, seconded to the MENRP climate change office. This Advisor began working at the MENRP at the end of Quarter 3. This advisor's main role is supporting the MENRP's climate change office in its role as Secretariat of the LEDS process.

In Quarter 3, EC-LEDS made presentations at the EWG and SC meetings, including an overview of the MARKAL Georgia model and its previous use in analyzing climate change mitigation scenarios for the Ministry of Energy. EC-LEDS, together with the MENRP and with the support of the Ministry of Energy, focused the second LEDS EWG and SC meetings on presenting previous work using the MARKAL Georgia model. EC-LEDS presented an overview of the MARKAL Georgia model, including plans to update the model to incorporate non-energy GHG and non-CO₂ energy GHG emissions, and the BAU and alternative scenarios evaluated for the Ministry of Energy (MOE) under a previous regional USAID program. The MENRP also presented Georgia's approach for developing a Intended Nationally Determined Contribution (INDC) as part of the UN Climate Negotiations, and its relationship to LEDS.

A Terms of Reference (TOR) for the SWGs was finalized with the MENRP and also shared with the EWG and the SC at these meetings. Follow-up meetings were held with the SWG Chairs to discuss the TOR and formation of the SWGs. The Energy, Buildings and Transportation SWGs were formed during Quarters 3 and 4. The other SWGs are still to be formed.

The MOE committed their Analytical Department (AD) to work alongside EC-LEDS experts in finalizing the BAUs and analyzing mitigation policy scenarios. In Quarter 4, a short workshop was held for the planning team, consisting of the Chairs of the SWGs and the Ministry of Energy's Analytical Department (MOE-AD), to cover approaches to developing mitigation policy scenarios and preparing them for analysis in the MARKAL Georgia model.

Provide advisory assistance to GOG

The first steps in developing a LEDS include developing an emissions inventory, an assessment of data available for LEDS planning, and Business-As-Usual (BAU) emissions projections. Georgia completed the 2011 emissions inventory in 2013 which is under review by the Ministry of Environment. The energy inventory was updated to 2012 and incorporated into the MARKAL Georgia model.

Updating of the MARKAL Georgia model was a shared responsibility of EC-LEDS and the Hydropower and Energy Planning (HPEP) project, as HPEP prepared MARKAL Georgia for use by the Ministry of Energy in developing an updated energy strategy. EC-LEDS focused on calibrating

CO₂ emissions from the energy sector based on Georgia-specific emissions factors, adding non-CO₂ GHG emissions, adding mitigation options for the energy sector, and adapting the model to incorporate non-energy emissions (industry, forestry, agriculture and waste).

Due to the limited funds available for Component 3 under the EC-LEDS program, USAID envisions other donors playing a critical role in supporting the LEDS process. Therefore, USAID requested the Ministry of Environment to organize a donor coordination meeting, with the assistance of EC-LEDS. EC-LEDS took the first step in preparing gaining a clear understanding of the donors working on LEDS-related assistance and mapping it to the LEDS process and assistance requirements. A matrix of donor programs supporting climate change mitigation and LEDS was developed and shared with the MENRP.

Development of the non-energy BAU projections will be based on various assumptions, including GDP. GDP forecasts are also necessary for modeling using MARKAL Georgia. It is essential that common assumptions be used for all aspects of the LEDS. In order to facilitate agreement on a common long-term GDP forecast for planning, EC-LEDS representatives met with the Fiscal Forecast Department at the Ministry of Finance which is developing its own GDP forecast in cooperation with the National Bank. More detail is being sought on the methodology, and comparisons are in process to the GDP forecast included in Georgia 2020 and a Ministry of Energy sectorial GDP forecast. A memo was drafted recommending a methodology and/or forecast for use in LEDS planning and discussed with MENRP. In Year 2, we will work with MENRP to add it to the LEDS EWG agenda.

Environmental Protection Activities

To ensure that all necessary measures are taken to protect the environment, and to comply with 22 CFR 216 Environmental Compliance Procedures and the approved Initial Environmental Examination (IEE, DCN: 2012-GEO-076) for this project, the EC-LEDS team has undertaken a series of activities to examine the environmental considerations of all program components and activities.

Based on the approved IEE document for the EC-LEDS program, a detailed description of Year I environmental compliance activities, along with the Environmental Monitoring and Management Plan (EMMP) for the program, was developed and incorporated into the Year I work plan. The EMMP describes how the program will implement all IEE conditions that apply to project activities, including monitoring the implementation of the project components and their effectiveness.

The approved IEE for the EC-LEDS program confirmed the potential for significant adverse effects of one or more activities and recommended carrying out an EA¹ or PEA pursuant to 22 CFR 216.3(a)(4). In Year I, a scoping statement (SS) was developed for those EC-LEDS Clean Energy program components that are not subject to a categorical exclusion or negative determination with conditions (i.e., a positive determination) per the approved IEE. The purpose of the SS is to identify the potential impacts associated with the various project activities that may be implemented as part of the EC-LEDS program. More specifically, the SS defines the scope (including geographic scope of program) and the significance of the issues and likely effects to be addressed under the Programmatic environmental Assessment (PEA) as well as to suggest outline, timing, organization, methodology and approach of the PEA report. The SS included a literature review of environmental issues associated with the EC-LEDS program, developing baseline information to serve as the basis for future monitoring, analysis of alternatives to the proposed actions, and conducting a comparison of the environmental impacts associated with these alternatives.

¹ An EA per 22 CFR 216.6, shall be prepared based on the SS and cleared by BEO prior to the start of activities that have not been excluded from further review.

Prior to finalizing the SS, the EC-LEDS team organized program SS stakeholder meetings in Quarter 2 in Tbilisi and Batumi to

- inform program stakeholders about the goal of the program and ensure their involvement at the early planning stage;
- discuss the potential types of projects supported by the EC-LEDS program; provide an opportunity for the proponents, relevant authorities, interested parties and other stakeholders to exchange information and express their views and concerns regarding the program and provide feedback; and
- ensure a positive attitude towards the program and increased cooperation between EC-LEDS Program and program stakeholders.

The stakeholder meetings, attended by 30 individuals (in total), were delivered in Georgian and English with all meeting materials provided in Georgian and distributed among the participants. All comments and suggestions received from stakeholders during the scoping meetings were considered and included in the SS. Comments on the SS were received from the USAID E&E Bureau Environmental Officer (BEO) in Quarter 3; responses were addressed and the SS was resubmitted to USAID in Quarter 4.

Cross-Cutting Activities

National Public Communications and Outreach

In Year I, a project launch was held in Tbilisi, and included welcoming remarks by USAID Mission Director Stephen Haykin, Minister of Environment Khatuna Gogaladze, Deputy Minister of Energy Mariam Valishvili, and was attended by members of the LEDS Steering Committee, international donor organizations, NGOs and universities. The event was covered by mass media.

EC-LEDS' Outreach and Communications goals include reaching 1 million Georgian citizens with core messages, leading to energy and money-saving actions by at least 10% of those reached; increasing citizen awareness that energy saving measures improve comfort in buildings and homes and reduce costs while decreasing GHG emissions; and creating a positive image for EC-LEDS, increasing demand for its services. The program's outreach strategy will also raise awareness of green building rating systems and benefits, targeted to households, private sector businesses and investors, and construction and development companies.

A baseline Knowledge, Attitudes and Behavior (KAB) and end-use survey was conducted during Quarter 3, including survey questionnaire design, conducting a pretest and completing interviews. This survey collected data on knowledge, attitudes and behaviors useful for designing and implementing the National Communications Plan, including the Community-Based Social Marketing Campaign and end-use data for developing the SEAPs.

EC-LEDS elaborated a pilot communications plan to test the messages and channels and to achieve the short-term objective of reaching 250,000 individuals in year I with messages about the benefits of energy efficiency and of the EC-LEDS program. The pilot outreach campaign was implemented in Tbilisi and Batumi during Quarter 4.

The National Communications Plan was finalized in Quarter 4 based on the Communications Strategy developed in Quarter 1, the results of the baseline survey (knowledge, attitudes and behaviors) and lessons learned from the pilot communications campaign implemented during Quarter 4. The National Communications Plan identifies communication objectives, key messages, and distribution channels for information dissemination, outreach activities, as well as monitoring and evaluation planning. Outreach activities will be implemented at two levels:

- A *nationwide outreach effort* will focus on communicating the importance of energy efficiency (EE) and clean energy (CE) measures for achieving LEDS and for reducing Georgia's

dependence on foreign energy imports. Outreach efforts at the *municipal level* will disseminate these national information campaign messages to key municipal-level stakeholders.

- In parallel, *regional outreach campaigns* will be directed at achieving specific Project targets – e.g., municipal energy efficiency goals, development of SEAPs, and implementation of the new Green Buildings certification program.

Drawing from international experience and focus group testing, a brand was developed to capture the essence of energy efficiency and conservation in a visually appealing way that conveys the modern choice and benefits of energy savings and environmental awareness to Georgians. The brand consists of a graphic identity and the tagline “Energy Efficiency Is A Smart Choice”, determined to be the most appealing for the Georgian audience based on focus group findings. In Year 2, the EC-LEDS program will integrate its newly developed brand and slogan into its communication and outreach activities.

CBSM campaigns in two pilot communities will serve as a complimentary behavior change approach to the program’s information-intensive outreach campaigns. Based on the results of the KAB baseline survey and a review of completed SEAPs, EC-LEDS selected Zugdidi and Kutaisi to implement CBSM campaigns to promote installation of CFL bulbs and youth participation in greening activities, respectively.

People with Disabilities (PWD), Youth and Gender

During Quarter 3, the EC-LEDS team visited East Georgia to become acquainted with the People with Disabilities (PWD), Gender and Youth NGOs active in the region, to assess the possibility of integrating these issues into the national outreach campaign. The NGOs included the Georgian Society of Nature’s Friends, Tanadgoma/Telavi, Foundation New Life, and others focused specifically on PWD, youth and gender issues.

EC-LEDS also attended the first official joint meeting of the Disabled Women association organized by the NGO *Woman and Reality*. The meeting was dedicated to the discussions of the problems related to the integration of PWD into a normal lifestyle.

During meetings with municipalities, EC-LEDS discussed the potential for integrating these groups into the development and implementation of their SEAPs and is considering hiring disabled women for data collection to support the SEAPs. In year 2, a meeting is planned with Tbilisi, to identify approaches for creating job opportunities for PWD. Large businesses operating in Georgia who would be interested in employing PWD will be invited to the meeting.

EC-LEDS will address the issues of gender, youth and people with disabilities in its outreach efforts. The National Communications Plan includes producing specific promotional/ educational materials people with disabilities using sign language for deaf and dumb and Braille for blind children and adults.

Cooperation with other USAID programs

I. Hydropower and Energy Planning (HPEP)

Collaboration with other EC-LEDS planning activities began through meetings with HPEP. Specifically, Winrock and HPEP collaborated on implementing their residential end-use surveys in order to link end use and attitudes/knowledge of consumers, as well as on obtaining municipally relevant data in addition to nationally relevant data. Also, EC-LEDS collaborated with HPEP in developing the Energy Reference scenario which will serve as the BAU scenario for the LEDS.

2. Regional EC-LEDS program

Meetings with the USAID-funded Regional EC-LEDS program (during Quarters 1 and 2) focused on how the EC-LEDS Clean Energy program can build on the regional program's work on the MARKAL Georgia model.

3. Integrated Natural Resource Management in Watersheds of Georgia (INRMW) Program

During Quarter 3, EC-LEDS met with the INRMW economist seconded to the Ministry of Environment, to learn about the capacity-building provided on Cost-Benefit Analysis. The techniques learned, including analysis of co-benefits of policies, can be applied to climate change policy analysis under the umbrella of the LEDS. EC-LEDS will explore ways to build on this expertise in conducting LEDS analysis. EC-LEDS also learned about the eco-clubs including the possibility to participate in an Eco-club Lessons Learned Forum planned for Year 2.

4. Waste Management Technologies in Regions

EC-LEDS and the Waste Management program implemented by ICMA identified several opportunities to collaborate. In Year 1, under Component 1 we made a presentation to eco-clubs on energy efficiency technologies and approaches at an event hosted by the Waste Management program, and they participated in our pilot outreach campaign in Batumi. In addition to continuing cooperation on outreach activities, we identified other opportunities including co-funding waste GHG mitigation projects in Batumi and possibly Telavi (if it becomes a SEAP municipality) and seeking funds to assist recycling businesses to become more energy efficient under the umbrella of SEAP implementation. Under Component 2, we plan to target businesses and municipalities by combining promotion of GB certification or energy performance labeling with recycling programs, and possibly work together in funding demonstration projects.

5. New Economic Opportunities (NEO)

During Quarter 3 the EC-LEDS team held a meeting with USAID's New Economic Opportunities (NEO) program. Potential areas of collaboration were discussed at the meeting, including opportunities where the two programs' grant funds may be used in synergy to achieve greater results. The NEO team will determine whether they can use their grant funds in cities, as their program is currently focused primarily in rural communities. NEO also reviewed their successful work with forming Condominium Associations (CAs), and developing an interest-free microloans program. Although their work is limited to internally-displaced persons, EC-LEDS will apply NEO's experience with CAs to projects with CAs in SEAP municipalities.

Cooperation with other Donors

1. EU's Inogate

EC-LEDS played a pivotal role in this Quarter, in linking the Ministry of Economy's Spatial Planning and Construction Department to Inogate, to pursue funding for developing a National EE in Housing plan, a requirement for complying with EU's EE and Buildings directives.

In Quarter 2, a meeting was held with the Ministry of Economy and Sustainable Development's Office of Construction Policy and Spatial Planning, about their plans to develop an Energy Efficiency in Housing Plan. EC-LEDS alerted the Ministry to the Inogate Sustainable Energy Program and he is currently in discussions with Inogate regarding funding for development of this plan, through Inogate's Assistance from the ITS Ad Hoc Expert (AHEF) facility.

2. Clima East

In Quarter 2, EC-LEDS submitted a proposal to Clima East for an urban development "Key Expert" to assist with SEAPS, and during Quarter 4 supported the Ministry of Economy to request an industrial "Key Expert" to assist with developing costs and savings assumptions for non-energy mitigation actions. The industrial mitigation data will be used for modeling mitigation actions using MARKAL Georgia, to be incorporated into the Industrial SWG's LEDS chapter and the Intended National Direct Contribution (INDC).

3. German Government

During Quarter, the EC-LEDS COP presented the EC-LEDS program at the "Town Twinning for Climate Protection" Conference held in Batumi. This conference was co-funded by the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety and the Federal Environmental Agency, co-sponsored by the City of Batumi, and organized by the Climate Alliance. The conference was designed to foster exchange between German and Georgian communities in the area of municipal climate protection and aimed to facilitate long-term cooperation. The development and implementation of Sustainable Energy Action Plans (SEAPs), a central tool in the European initiative Covenant of Mayors (COM), was the focus of the conference.

4. UNDP

EC-LEDS plans to collaborate with the UNDP-GEF funded Green Cities Initiative to be implemented in Batumi. This project, focused on the transport sector, will provide a further injection of funds for the implementation of mitigation projects.

5. European Union COM-East

EC-LEDS team members participated in the Covenant of Mayors practitioners' workshop held in Tbilisi on April 1 and 2, organized by the COM East office. At this workshop, EC-LEDS partner Remissia delivered a presentation on the key barriers for municipalities in Georgia to develop and implement SEAPs.

Local partner capacity-building

Local partner capacity-building is a key element of the EC-LEDS program, and Winrock is committed to building partners' capacity to work directly with USAID. Training and capacity-building provided during Year I contributed to local partners' success.

In Quarter 1, Winrock delivered training for EC-LEDS local partners on Internal Controls Strengthening. The goal of the training was to introduce EC-LEDS local partners to organizational internal controls, procurement and administrative procedures, accounting policies, and branding and marking procedures. Winrock conducted another training on Leadership, People Management and Meeting Facilitation Skills in Quarter 3. The training was specifically designed for Remissia and GBC-Georgia, in support of Outcome Indicator #6 (*Number of local organizations positioned to receive USG funding and implement USG projects as a result of EC-LEDS assistance*), as leadership, people management and meeting facilitation skills are core components of institutional strengthening.

Short workshops were provided on Branding and Marking and developing cost share information. Work also began on finalizing a short list of for conducting an Organizational Capacity Assessment. Though Branding and Marking was covered at project start-up, Winrock conducted additional training for local partners on branding and marking in Quarter 3.

Conducting an organizational capacity assessment for local partners has been shifted from Year 1 to Year 2.

Deliverables and Products Submitted During Year I

During Year I of the program, the deliverables listed below were provided to USAID.

Component	Title/Description	Date submitted to USAID
all	Initial Work Plan	8-Nov-13
all	Draft Initial PMP	15-Nov-13
all	Work Plan EC-LEDS-YIWP Revised	31-Dec-13
all	EC-LEDS Quarterly Progress Report Oct-Dec 2013	10-Jan-14
all	EC-LEDS Work Plan and PMP Year I - Revised	24-Jan-14
Public Outreach	Project Launch January 28, 2014 Media Coverage Report	30-Jan-14
Component 1	Letter to USAID documenting the criteria for municipality selection and ranking of the municipalities according to the criteria	19-Feb-14
all	EC-LEDS Work Plan and PMP Year I - Revised	21-Feb-14
all	EC-LEDS Work Plan and PMP Year I - Revised/Final	14-Mar-14
Component 3	LEDS Presentation to Ministry of Economy and Sustainable Development	16-Mar-14
Component 3	LEDS Presentation to Ministry of Agriculture	16-Mar-14
Component 3	LEDS Presentation to Ministry of Regional Development and Infrastructure	16-Mar-14
Environmental Compliance	Environmental Scoping Statement	31-Mar-14
all	Quarterly Progress Report Year I Qtr 2	18-Apr-14
Component 1	Letter to USAID documenting the criteria for municipality selection and ranking of the municipalities according to the criteria	22-Apr-14
Component 2	Georgia Green Building Assessment Report	19-May-14
Component 2	Green Building Certification Working Group Meeting #1 Report	19-May-14
Public Outreach	Public Awareness and Communication Strategy	13-Jun-14
all	Work Plan EC-LEDS-YIWP Revised	16-Jun-14
Component 3	LEDS Presentation to Forestry Agency	18-Jun-14
Component 3	LEDS Presentation to GeoStat	18-Jun-14

all	Quarterly Progress Report Year I Qtr 3	11-Jul-14
all	Work Plan EC-LEDS-YIWP Revised	31-Jul-14
all	Letter to USAID Regarding Work Plan changes	21-Aug-14
Public Outreach	Media Coverage Report - July-August 2014	02-Sep-14
Public Outreach	Pilot Communication Campaign Plan	02-Sep-14
Component 2	Report On the Second Meeting of the Green Building Rating and Certification Working Group	02-Sep-14
Component 2	Memo Regarding GB Principles	04-Sep-14
Component 2	Memo Regarding GB Accreditation	09-Sep-14
Public Outreach	Media Coverage Report - August-September 2014	09-Sep-14
All	EC-LEDS Draft Work Plan for Year 2	15-Sep-14
Component 3	Energy BAU Presentation to the LEDS Working Group Meeting – Pat DeLaquil	25-Sep-14
Component 3	EWG Meeting Presentation – Dana Kenney	25-Sep-14
Cross Cutting	EC-LEDS Baseline Survey Report	26-Sep-14
Component 3	LEDS Forestry SWG Presentation - Dana Kenney	26-Sep-14
Component 3	LEDS Forestry SWG Presentation - Pat DeLaquil	26-Sep-14
Component 1	Kutaisi SEAP-Draft (Geo)	26-Sep-14
Component 1	Zugdidi SEAP-Draft (Geo)	26-Sep-14
Component 2	Report on Analysis of Green Building Rating and Certification Systems - An Approach for Georgia	29-Sep-14
Component 2	Green Building Training Plan	29-Sep-14
Public Outreach	Media Coverage Report - September 2014	29-Sep-14
Public Outreach	National Communications Plan Report	29-Sep-14
Component 2	Green Building Marketing Strategy Report with Annex I	29-Sep-14
Component 3	Presentations for SWG Meetings on Transport and Industry – Pat DeLaquil and Dana Kenney	29-Sep-14
all	EC LEDS Grants Manual Draft	29-Sep-14
Component 1	Municipal Emission Inventory, Projection and Mitigation Planning Tool (muni-EIPMP) with Software	30-Sep-14

Component 3	LEDS Business-As-Usual (BAU) Scenario Report	30-Sep-14
Component 3	Presentations for Buildings and Energy SWG meetings - Pat DeLaquil and Dana Kenney	30-Sep-14
Component 1	Rapid Assessment of Factors Affecting SEOs in EU Cities	30-Sep-14
Component 1	BATUMI SEAP-Draft (Geo)	30-Sep-14
Component 1	Batumi and Zugdidi Project Proposals (Geo)	30-Sep-14
Component 1	Assessment of Available Financing Sources for Mitigation Projects	30-Sep-14
Cross Cutting	Report on EC-LEDS Partner Capacity Building FY 2014	30-Sep-14
Environmental Compliance	EC-LEDS draft PEA	30-Sep-14
Component 1	Monitoring, Reporting and Verification Framework and Methodology for Sustainable Energy Action Plans (with JRC Guidelines)	07-Oct-14
Component 3	Annual Summary of Progress Made by GOG on Developing LEDS	07-Oct-14
Component 3	Memo on Capacity Building Needs of MENRP to Manage the LEDS Process	07-Oct-14

Lessons Learned

The process of organizing and preparing to develop a LEDS at the National level has taken more time than envisioned. This may largely be due to the fact that most donor-funded programs of this type include substantial technical assistance and the process is usually managed by a donor-funded expert. The LEDS Advisor will be critical in helping to manage the LEDS process, and in linking the technical assistance available under EC-LEDS to the LEDS Ministries' decision-making processes. However, it has become clear that sectorial experts will be needed to assist the Ministries in identifying appropriate mitigation policies, integrating these into their development plans, and drafting their LEDS.

The impact of local elections demonstrated that flexibility is required to ensure the process of developing and implementing SEAPS, including commitments of municipal budgets for SEAP projects.

III. PROGRAM PROGRESS (Quantitative Impact)

The annual targets for most of the indicators were met. The indicators for which targets were not met include OC1, OC2, OC3, OC4 and OP20. The annual targets for OC1 Number of individuals with increased economic benefits, OC2 Quantity of greenhouse gas emissions, OC3 Energy saved due to energy efficiency/conservation, and OC4 Number of private sector clean energy investments were not met for a variety of reasons related to delayed USAID programs and the impact of local elections.

Initially USAID had planned to set up a Development Credit Authority (DCA) guarantee mechanism at one or several local banks to support implementation of Component I projects. These targets were not reached primarily because the DCA program planned by USAID was not underway in Year I. Also, commitments of municipalities' own budgeted infrastructure funds were delayed due to the elections. After the elections, it took time for the new staff to become acquainted with the existing situation and begin making decisions about investing in projects. In addition, the change in the law on local governance further complicated the situation and resulted in municipalities not spending any of their own funds. Additionally, the EU funded SUDeP program proposal selection process is behind schedule, and the decision on the two proposals (for Batumi and Rustavi) submitted to SUDeP has not yet been finalized. Thus, though projects were in the pipeline for investment, no projects were financed in year I as hoped, resulting in no energy or GHG emissions achieved.

The annual target OP 20 Number of Financial Institutions Trained for EE, RE and Green Building indicator was also not met. As mentioned above, USAID's DCA program was not initiated. EC-LEDS had planned to conduct bankers' trainings to support DCA implementation, including assisting partner banks in creating project pipelines and in managing the DCA portfolio. Since USAID put DCA on hold, the trainings were not conducted.

INDICATOR TITLE: Number of Individuals with increased economic benefits derived from sustainable natural resource management and conservation as a result of USG assistance (OC 1)									
UNIT: #Individuals	DISAGGREGATE BY: None								
	Geographic Location	Event			Date	total			
<i>Results:</i>									
Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
	Individuals	0	50,000	0	200,000		250,000		500,000

INDICATOR TITLE: Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO2 equivalent (CO2_e), reduced or sequestered as a result of USG assistance (OC 2)									
UNIT: Metric tons of CO2	DISAGGREGATE BY: None								
	Geographic Location	Event			Date	total			
<i>Results:</i>									
Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
		0	20,000	0	43,000		55,000		236,000

Metric tons of CO2								
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INDICATOR TITLE: Energy saved due to energy efficiency/conservation projects as a result of USG assistance (OC 3)									
UNIT: GW/h _e	DISAGGREGATE BY: None								
	Geographic Location	Event			Date		total		
Results:									
Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
GW/h _e	0	20,000		42,000		75,000		315,000	

INDICATOR TITLE: Number of private sector clean energy investments (OC 4)									
UNIT: USD	DISAGGREGATE BY: None								
	Geographic Location	Event			Date		total		
Results:									
Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
	0	1.5	0	2.5		3.0		14	

USD Million								
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INDICATOR TITLE: Number of low emissions development plans developed and/or implemented as a result of USG assistance (LEDS, SEAP, other) (OP 1)

UNIT: # Plans developed	<i>DISAGGREGATE BY: None</i>			
	<i>Geographic Location</i>	<i>Event</i>	<i>Date</i>	<i>total</i>
	Kutaisi	SEAP for Kutaisi was developed	June, 2014	1
Zugdidi, Batumi	SEAP for Zugdidi, Batumi was developed	September, 2014	2	

Results:

Additional Criteria <i>If other criteria are important, add lines for setting targets and tracking</i>	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
	# Plans developed	0	3	3	7		0		10

INDICATOR TITLE: Number of institutions with improved capacity to address climate change issues as a result of USG assistance (OP 3)

UNIT: Number of Institutions	<i>DISAGGREGATE BY: None</i>			
	<i>Geographic Location</i>	<i>Event</i>	<i>Date</i>	<i>total</i>
	Kutaisi; Batumi; Zugdidi; Tbilisi	Municipalities engaged in the process of SEAP preparation and updating	April-September 2014	3
		10 Municipalities attending training on 'SEAP Workshop'	September 2014	10

Results:

Additional Criteria <i>If other criteria are</i>	Baseline	Y1	Y2	Y3	End of Project

<i>important, add lines for setting targets and tracking</i>		<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>
# Number of Institutions	0	9	10	5		0		14	

INDICATOR TITLE: Number of stakeholders using climate information in their decision making as a result of USG assistance (OP 4)					
<i>UNIT:</i>	<i>DISAGGREGATE BY: None</i>				
Number of Stakeholders	<i>Geographic Location</i>	<i>Event</i>	<i>Date</i>	<i>total</i>	
	Kutaisi; Batumi; Zugdidi; Tbilisi	4 municipalities that developed or updated SEAP;	April-September 2014	4	
	Ministry of Energy, Ministry of Environment, Ministry of Economy, Ministry of Agriculture, Ministry of Infrastructure, Energy Efficiency Center, World Experience for Georgia, EU's Clima East program, GOGC Georgian Oil and Gas Corporation	5 ministries and 3 other stakeholders participating in Sub-working Group (SWG), Expert Working Group (EWG) and Steering Committee (SC) meetings	May and September 2014	8	
<i>Results:</i>					
<i>Additional Criteria If other criteria are</i>	<i>Baseline</i>	Y1	Y2	Y3	<i>End of Project</i>

<i>important, add lines for setting targets and tracking</i>		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
# Number of Stakeholders	0	8	12	6		0		14	

INDICATOR TITLE: Number of laws, policies, strategies, plans, agreements or regulations addressing climate change mitigation officially proposed, adopted, or implemented as a result of USG assistance (OP 5)									
UNIT:	DISAGGREGATE BY: None								
Number of Laws, Policies, Strategies	Geographic Location	Event			Date	total			
		Construction code incorporating language on energy efficiency and green buildings			September 2014	1 proposed			
Results:									
<i>Additional Criteria If other criteria are important, add lines for setting targets and tracking</i>	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
# Number of Laws, Policies, Strategies	0	1 proposed	1 proposed	1 proposed		1 adopted		1 adopted 2 proposed	

INDICATOR TITLE: Number of climate change mitigation tools, technologies or methodologies developed, tested and/or adopted as a result of USG assistance (OP 6)									
UNIT:	DISAGGREGATE BY: None								
Number of Tools	Geographic Location	Event			Date	total			
	For all municipalities	Development and testing of the muni-EIPMP tool during the			March-April 2014	1			

		preparation of Batumi, Kutaisi and Zugdidi SEAPs		
		MARKAL model incorporation of non-energy GHG emissions tested	July-September 2014	1

Results:

Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
	# Tools	0	1	2	2	2	2	5	

INDICATOR TITLE: **Number of individuals reached through outreach campaigns (OP 10)**

UNIT:	DISAGGREGATE BY: None			
Number of Individuals	Geographic Location	Event	Date	total
	Batumi	Number of People Reached Through Pilot Awareness Campaign	April-September 2014	Public Service Announcements-78,000 Awareness raising activities in Tbilisi and Batumi-36,350 Media Coverage-30,235 Web Sources-106,072 In Total (Y1)- 254,157

Results:

Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved

<i>tracking</i>								
# Number of Individuals	0	250,000	254,157	250,000		250,000		1 million

INDICATOR TITLE: Number of USG-supported training or activities that contribute to building the EE knowledge and skills in the GOG, Municipalities, industry and other stakeholders (OP 11)

UNIT:	DISAGGREGATE BY: None			
Number of Training activities	Geographic Location	Event	Date	total
		Batumi, Kutaisi	“On job training for the instructors on Data Gathering, Mitigation Measures and Planning”	March, 2014
	Batumi, Kutaisi	“On job training for the representatives of the municipalities on Data Gathering, Mitigation Measures and Planning”	March, 2014	
	Zugdidi	“On job training in data gathering in all sectors”	April, 2014	
	Zugdidi	“Training in energy audit”	April, 2014	
	Zugdidi	“On job training in data gathering and characteristics calculation for the buildings”	May, 2014	
	Zugdidi	“Training in energy audit”	May, 2014	
	Kutaisi	“On job training in preparation of the project proposals for SEAP”	June, 2014	In total 6 events in Q3 (Apr – June), 2014
	Tbilisi	“Training of experts in inventory preparation for SEAP”	April-June, 2014	
	Tbilisi	“LEED/BREEAM introductory training of trainers” conducted by International Experts	September -October, 2014	

Tbilisi	“Expert Target Group Meetings on Green Building Issues”	September , 2014	1 event (5 meetings) In total 2 events in Q4 (July – Sept), 2014 In total 10 events for Year 1
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Results:

Additional Criteria <i>If other criteria are important, add lines for setting targets and tracking</i>	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
	# Training activities	0	6	10	30	14	50		

INDICATOR TITLE: Number of individuals receiving USG supported training in technical energy fields (OP 12)

UNIT:	<i>DISAGGREGATE BY: None</i>			
Number individuals	Geographic Location	Event	Date	total
	Batumi, Kutaisi	“On job training for the instructors on Data Gathering, Mitigation Measures and Planning”	March, 2014	5 (1 female, 4 male)
	Batumi, Kutaisi	“On job training for the representatives of the municipalities on Data Gathering, Mitigation Measures and Planning”	March, 2014	4 (4 male)
		SEAP Work-shop Training on “Data Gathering Inventory Preparation”	September 2014,	67 (24 female, 43 male)

Results:

Additional Criteria <i>If other criteria are</i>	Baseline	Y1	Y2	Y3	End of Project
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<i>important, add lines for setting targets and tracking</i>		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
	0	50	76	50	0	100			
# Individuals									

INDICATOR TITLE: Number of promotional plans and campaigns implemented to increase awareness of citizens about energy efficiency (OP 14)									
UNIT:	DISAGGREGATE BY: None								
Number of Plans	Geographic Location	Event			Date	total			
	Tbilisi, Zugdidi, Kutaisi	National Communication Strategy			September 2014	1			
		CBSM Strategy				1			
Results:									
<i>Additional Criteria If other criteria are important, add lines for setting targets and tracking</i>	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
# Plans	0	2	2 (Implementation Ongoing)	2	2	2	2	2	2

INDICATOR TITLE: Number of individuals receiving USG supported training in energy related policy and regulatory practices (OP 16)									
UNIT:	DISAGGREGATE BY: None								
Number individuals	Geographic Location	Event			Date	Total			
	Batumi, Kutaisi	"On job training for the instructors on Data Gathering, Mitigation Measures and Planning"			March, 2014	5 (1 female, 4 male)			
	Batumi, Kutaisi	"On job training for the representatives of the municipalities on Data Gathering,			March, 2014	4 (4 male)			

	<i>Mitigation Measures and Planning</i>		<i>In total 9 (1 female, 8 male) in Q2, 2014</i>
<i>Zugdidi</i>	<i>“On job training in preparation of the project proposals for SEAP”</i>	<i>June, 2014</i>	<i>1 (1 male)</i>
<i>Tbilisi</i>	<i>“Training of experts in inventory preparation for SEAP”</i>	<i>April-June, 2014</i>	<i>5 (1 female)</i>
<i>Tbilisi</i>	<i>“Low Emission Development Strategy WG Meeting”</i>	<i>May 14, 2014</i>	<i>16 (8 female, 8 male)</i>
<i>Tbilisi</i>	<i>“Low Emission Development Strategy SC Meeting”</i>	<i>May 16, 2014</i>	<i>7 (4 female, 3 male)</i>
			<i>In total 29 (14 female, 15 male) in Q3, 2014</i>
<i>Tbilisi</i>	<i>Buildings SWG meeting</i>	<i>August 7, 2014</i>	<i>6 (3 female, 3 male)</i>
<i>Batumi</i>	<i>“SEAP Workshop”</i>	<i>September 17-19, 2014</i>	<i>67 (24 female, 43 male)</i>
<i>Tbilisi</i>	<i>LEDS EWG Meeting</i>	<i>September 25, 2014</i>	<i>13 participants (5 female, 8 male)</i>
<i>Tbilisi</i>	<i>Forestry SWG meeting</i>	<i>September 26, 2014</i>	<i>6 participants (3 female, 3 male)</i>
<i>Tbilisi</i>	<i>Transport SWG meeting</i>	<i>September 29, 2014</i>	<i>7 participants (4 female, 3 male)</i>
<i>Tbilisi</i>	<i>Building SWG meeting</i>	<i>September</i>	<i>5 participants (1 female, 4 male)</i>

	Tbilisi	Energy SWG Meeting	30, 2014 September 30, 2014	8 participants (6 female, 2 male) 99 participants Qtr 4 (41 female, 58 male) Total for Year 1 , 2014 is 137 (56 female, 82 male)
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Results:

Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
	# Individuals	0	40	137	50		0		90

INDICATOR TITLE: **Number of MRV plans developed to track impact of SEAPs implementation (OP 17)**

UNIT:	DISAGGREGATE BY: None			
Number of Plans	Geographic Location	Event	Date	total
	Kutaisi; Batumi; Zugdidi; Tbilisi	Developed MRV Plans	June-September , 2014	4

Results:

Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
		0	4	4	3		3		10

# Plans								
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INDICATOR TITLE: Number of individuals at national and local level trained in climate change as a result of USG assistance (OP18)									
UNIT:	DISAGGREGATE BY: None								
Number of Individuals	Geographic Location	Event			Date		total		
	Batumi	SEAP Workshop			September 2014		67 (24 female, 43 male)		
Results:									
Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Y1		Y2		Y3		End of Project	
		Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved
# Individuals	0	10	67	40		20		70	

INDICATOR TITLE: Number of developers, investors/building owners/buyers aware of the green building rating and certification system (OP 19)										
UNIT:	DISAGGREGATE BY: None									
Number of Businesses	Geographic Location	Event			Date		total			
	Tbilisi	1 st "Working Group Meeting for the Creation of Green Building Rating and Certification Board"			December 19 2013		11			
	Tbilisi	2 nd "Working Group Meeting for the Creation of Green Building Rating and Certification Board"			June 3, 2014		3			
Results:										
Additional Criteria If other criteria are important, add lines for setting targets and tracking	Baseline	Results Achieved by Q2, 2014	Y1		Y2		Y3		End of Project	
		Achieved	Target	Achieved	Target	Achieved	Target	Achieved	Target	Achieved

<i>tracking</i>										
# Businesses	0	14	10	14	20		0		30	

INDICATOR TITLE: Number of Financial Institutions Trained for EE, RE and Green Building (OP20)									
UNIT:	<i>DISAGGREGATE BY: None</i>								
# Institutions	<i>Geographic Location</i>	<i>Event</i>			<i>Date</i>		<i>total</i>		
Results:									
Additional Criteria <i>If other criteria are important, add lines for setting targets and tracking</i>	Baseline	Y1		Y2		Y3		End of Project	
		<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>
# Institutions		3	0	0	0	0	0	3	

INDICATOR TITLE: Number of agencies actively participating in joint LE DS steering committee and working group meetings (OP 21)									
UNIT:	<i>DISAGGREGATE BY: None</i>								
Number of Agencies	<i>Geographic Location</i>	<i>Event</i>			<i>Date</i>		<i>total</i>		
	<i>Tbilisi</i>	<i>LEDS working group meetings (Ministry of Energy was actively involved)</i>			<i>May 14 and 16, 2014</i>		<i>1</i>		
		<i>LEDS EWG and SC meetings (Ministry of Energy, Ministry of Environment, Ministry of Economy, Ministry of Agriculture, Ministry of Infrastructure, EEC)</i>					<i>7</i>		

		Energy Efficiency Center, WEG World Experience for Georgia, EU Clime East, GOGC Georgian Oil and Gas Corporation)	September 25, 2014	
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Results:

<i>Additional Criteria If other criteria are important, add lines for setting targets and tracking</i>	Baseline	<i>Results Achieved by Q2, 2014</i>	<i>Y1</i>		<i>Y2</i>		<i>Y3</i>		<i>End of Project</i>	
		<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>	<i>Target</i>	<i>Achieved</i>
	# Agencies	0	1	6	7	0		0		6

IV. MONITORING

In Year I the PMP database was finalized and data was entered. Data Quality Assessment Worksheets (DQAW) for were prepared for the following indicators at the request of USAID:

- OC2 Quantity of greenhouse gas (GHG) emissions, measured in metric tons of CO₂ equivalent);
- OP3 Number of institutions with improved capacity to address climate change issues; and
- OPI6 Number of individuals receiving USG supported training in energy related policy and regulatory practices.

V. PROJECT ADMINISTRATION

Constraints and Critical Issues

During Year I, the local government elections, held in June (with runoffs in July), impacted program implementation, causing some delays, as outlined in Work Plan changes, shared with and approved by USAID.

Parliament also enacted new legislation separating municipalities from the cities. This may affect Component I work, as most of the COM signatories were Municipalities which included the Cities and the surrounding villages and settlements. Whether the City now remains as the COM signatory will depend on Georgian legislation. The law was enacted on June 15th immediately after the local elections, though the respective bylaws and normative acts will not be issued until later in 2014.

According to the new legislation, several new self-governing cities were identified and established. As indicated in the Year I work plan, we will provide technical assistance to only four municipalities for SEAP development in Year I. The remaining six municipalities are to be assisted in Year 2 and they may change, depending on the detailed implementation of this legislation. We expect high interest in SEAPS by almost all local governments in the new self-governing cities. We plan to hold a second round of visits and interviews with local governments in Quarter 4, particularly for municipalities being considered for program assistance in Year 2. With these changes, EC-LEDS may need to revisit the evaluation criteria used to select municipalities to receive program support.

As indicated in the year I work plan, only 4 municipalities were to be provided technical assistance in Year I, 3 SEAPS and assistance to Tbilisi in conducting their SEAP monitoring. The remaining 6 municipalities to be assisted by the EC-LEDS program may change. High interest in SEAPS by almost all local governments in the potential new self-governing cities is expected. A second round of interviews with local governments will be held in Year 2, to verify the priorities for Year 2.

The completion of the LEDS BAU was delayed as it was dependent on finalization of the reference scenario, which was developed through assistance from the HPEP program. The delay in finalizing the BAU has also delayed consideration and analysis of the alternative scenarios. This could delay completion of the LEDS.

Personnel

In addition to the program staff, the following technical resources were added to the team in Year I to support the program activities and objectives.

Mr. Brian McCotter was engaged in Quarter 2 as an EC-LEDS International Outreach Consultant. Mr. McCotter supported the development and implementation of the baseline survey by advising the M&E consultant on measuring the impact of outreach programs, and worked with the EC-LEDS Communications and Outreach Manager in development and implementation of the pilot outreach campaign and finalization of the National Communications Plan.

Dr. Michael Hanowsky was hired as an International LEDS Consultant to support the COP's work with the EC-LEDS Program partner Ministries. Dr. Hanowsky conducted research and developed presentations to help engage the Ministries in the LEDS process.

In Quarter 2 it was decided to hire a LEDS to be seconded to the Ministry of Environment Advisor to support planning and implementation of Georgia LEDS. Mr. Kakha Kharchkhadze assumed this position June 16, 2014. As an important member of the LEDS expert group team, the Advisor is responsible for supporting development and implementation of the Georgia LEDS Initiative (as described in the USG-GOG MOU and the GOG's LEDS Charter), with a view to promote an integrated and cohesive approach to LEDS. The Advisor provided assistance and technical support to GOG in formulating and implementing a LEDS; building the capacity of GOG counterparts in coordinating the LEDS process; and helped the GOG to ensure that all LEDS-related activities implemented by GOG and international donors are integrated into a cohesive GOG LEDS program.

In Quarter 4 the team engaged consultant Mr. Mamuka Gvilava, a PEA expert who completed the draft PEA.

Cooperative Agreement Modifications and Amendments

During Year I, Winrock's EC-LEDS agreement was modified three times: 1) to obligate more funding; 2) an administrative modification to authorize payment by letter of credit; and 3) a request for budget realignment to reflect a revised approach to Component 2 with an associated reduction of resources shifted to Component 3 work. This realignment also removed Dr. John Williams as Key Personnel for Component 2.

On June 10, 2014 the USAID Agreement Officer approved shifting the due date of the initial draft of the Year 2 work plan from August 1 to September 15, 2014 due to the difficulty in planning Component 1 activities until after the second round of municipal government elections planned for July 2014.

VI. YEAR 2 WORK PLAN

The work plan for Year 2 was submitted to USAID on September 15, 2014, the revised date per a CA amendment approved on June 10th. EC-LEDS is currently awaiting feedback from USAID on the proposed work plan.