ANNEX I – THE ACTION

1. Description of the action

1.1. Objectives and Outcomes

In spite of their active participation in Covenant of Mayors (CoM) policy theGeorgian municipalities still lack managerial and technical capacities in developing sustainable energy projects, experience in implementation of full-size sustainable investment projects, suffer from limited local budget and incomplete procurement procedures.

Therefore, the aim of the Action is to enhance Georgian CoM signatory cities/municipalities capacities in climate change mitigation and fulfilment of sustainable local energy policy through implementation of investment projects in line with their Sustainable Energy (Climate) Action Plans (SE(C)APs

The Action will be implemented in two municipalities of Telavi City and Telavi Community. The results and good practices of the pilot activities envisaged under this Action will be disseminated to other municipalities across the country and beyond. Please note that according to the recent self-government reforms in Georgia, on 27 November, 2017 these two municipalities have beenmergedandthe new - "Self-Governing Community Telavi Municipality"(with administrativecentre– Telavi City)as legal successor of previous two municipalities (Telavi City & Telavi Community) was established. The Beneficiary haveinformedthe Contracting Authority about reorganization and provided a"Registration Letter" (Georgian copy with officialEnglish translation)evidencing the establishment of new municipality. In Addition, a new established municipality as a legal successor of two municipalitiesprovided'Financial Commitment Letter' expressing readinessto co-finance 20% of theproject budget.

Specific objectives of this Action are following

- To promote introduction of energy efficiency measures as well as use of renewable energy sources by implementingcomplexpilot investment projects in Georgian municipal buildings;
- To promote renewable energy production and use by utilising locally available biomass and applying innovative technologies in above mentioned pilot Georgian municipalities;
- To assess the possibility and initiate the establishment of renewable energy supply chain in the selected municipalities for ensuring long-term public service (supplement of biomass sources) between public and private sectors;
- To support local authorities in improving their energy security, diminishing dependence on imported fossil fuels, reducing GHG emissions, and improving their citizens' quality of life;
- To strengthen the capacity of selected pilot Georgian municipalities in implementingSE(C)APs and sustainable energy investment projects;
- To raise awareness on CoM policy and sustainable energy investment projects and promoted their replication in other Georgian municipalities, in particular CoM signatories.

The outcomes of the Action are:

- Enhanced managerial and technical capacities of local authorities in target municipalities to transform SE(C)APs measures into investment projects and fulfil CoM commitments through implementation of Sustainable energy investment projects;
- Decreased dependence on imported fossil fuels & increased share of locally available renewable energyresources in final municipal energy consumption;

- Raised awareness on benefits of clean energy technologies among interested stakeholders and public at large in target municipality and beyond;

The Direct Beneficiaries of the Action are decision makers; municipal service providers of local authorities of self-governing Community Telavi & self-governing City Telavi (as co-applicants of the Action) as well as the employers and users of theselectedrenovated public buildings, which energy efficiency parameters were improved. The Action will contribute to:

- the implementation of local SE(C)APs as well as CO2 reduction commitments taken under CoM Policy;
- the implementation of measures envisaged in SE(C)APs of self-governing Telavi City and self-governing Telavi Community such as an application of renewable energy and energy efficiency technologies and utilisation of agricultural waste;
- the utilization of locally available vineyard pruning resides (biomass) as an energy source and reduction of energy dependence on imported fossil fuel;
- the introduction of innovative energy efficienttechnology such as a hybrid heating system working on vineyard pruning resides and natural gas;
- the introduction of innovative EE technologies through complete thermo-modernisation of (2) public buildings that will facilitate to the enhancement of technical capacities of the target groups;
- the raising of management capacities of the target groups through implementation of sustainable investment projects;
- local economic and business development through promotion of utilization and production local biomass resources as an energy source;
- improvement of indoor environment of municipal/public buildings well as working conditions for staff andvisitors/users;
- achievement of the actual reduction of energy consumption against baseline and related energy costs as well as emission reductions at the target sites through installed energy efficiency measures and renewable energy use and productiontechnologies;
- Enhanced technical & management capacitiesas well as raised knowledge of the direct beneficiaries about mitigation (through EE & RE technologies) as well as adaption measures (through agriculture waste management);

Main IndirectBeneficiaries of the Action are private companies; more specifically agro vine (vine-growing) farms and/or companies providing their agricultural wastes (vineyard pruning resides) to the municipalities as an energy source.The Action will promote:

- the establishment of renewable energy supply chain to ensure long-term public service (supply of biomass sources) between public/municipal and private sectors;
- the improvement of agricultural waste management through producing of biomass energy;
- the improvement of the potential for additional income generation by selling by-products;
- improvement of cooperation between public/municipal and private sectors throughdevelopment of sustainable energy investment projects.

Local population of the municipalities will also benefit. Hence realisation of this sustainableinvestment project will stipulate improvement of local social and economic conditions.

1.2. Activities and Outputs

The Action envisages the following activities.

Activity 1: General Coordination and Management
Sub-Activity 1.1. Coordination of the Action: development of cooperation agreements/memorandums (if needed), establishment of the partner roles between lead applicant & co-applicants in terms of the activities, outputs and deadlines, organization and facilitation of contacts among all involved participants;
Sub-Activity 1.2.Day-to-day management of the Action including ongoing identification of issues and deadlines, monitoring and team building, providing access to documents, providing co-applicants with administrative and financial information, ensuring on-time and proper payments to the Action participants (private companies/suppliers), organization of steering/management committee meetings;
Sub-Activity 1.3.Monitoring and evaluation of process and progress of the overall Action as outlined in the grant application and to be supplied steering/management committee members and development of Action summary updates (lead applicants, co-applicants).
Sub-Activity 1.4. Staffing, development of detailed job descriptions, signing contracts with project staff and elaboration of the detailed project work plan;
Sub-Activity 1.5. Site visits and meetings with co-applicants and establishment of Steering/Management Committee;

The general coordination and management of the Action will be conducted by Energy Efficiency Centre Georgia (EECG)in close cooperation with co-applicants*(the self-governing community Telavi municipality)* throughout entire projectduration. EECG, as a lead applicant will take project leadership role and coordinate co-applicant (target municipality), develop contracts and/or memoranda of cooperation, coordinate activities, provide for day-to-day management of the Action activities, ensure monitoring and evaluation of the project's progress.

EECG will manage and oversee development of energy audits, procurement procedures, all other project related activities and its feedback on progress during the implementation period of the Action. EECG will also be responsible for working with project partners, team building, and inter-partner communication.

In order to ensure successful implementation of the Action a Steering/ManagementCommittee (S/MC) will be set up and a Memorandum of Cooperation (MoC) will be signed between EECG and target municipality. The S/MCwill meet and cooperate regularly to follow up on allthe Action activities and will consist ofrepresentatives of the EECG *(project coordinator (1) & project manager (1))*as a Lead Applicant and target municipality*(mayor or equivalent (1)), CoM contact persons (2))* as Co-applicants in charge of the coordination of local activities.In order toensure donor's participation in all major discussions and decisions EECG intends to invite project manager from EU Delegation to Georgia to become member of S/MC. This. S/MCwill approve the project team of EECG and will be actively involved in the procurement procedures as well as in all strategic decision making process. As for EECG, it will be executive of all decisions and/or agreements made by the S/MC.

At the project inception phase, EECG will establish a project team responsible for day-to-day management of the Action. Afterproject team establishment, EECGwill develop a detailed job descriptions and sign contracts with each team member. The projectteam will develop a detailed working plan and organize site visits to the target municipalities (co-applicants) in order to introduce and plan all joint activities under this Action along with co-applicants.

Besides,EECG will be responsible for thepromotion and dissemination of the project related activities and distribution of relevant materials by organizing sustainable energy weeks/days during the whole Action implementation.

Outputs of Activity 1:
Output 1.1: Creation of project teamand establishment the Steering/Management Committee and contractwith the project staff signature;
Output 1.2: Elaborated detailed work plan (timetable) for years 2018-2021;
Output 1.3: Memorandum of Cooperation between Lead Applicant & Co-applicants is signed;
Output 1.4: Steering/Management Committee meeting and site visit reports are available;
Output 1.5: Interim Progress Report & Financial Report with all relevant supporting documents are elaborated and approved;
Output 1.6: Final Progress & Financial Report with all relevant supporting documents is elaborated and approved.

Activity 2: Selection of two pilot municipal/public buildings in consultations with co-applicants and performance of their energy audits
Sub-Activity 2.1: Identification of target municipal/public building stock.

Sub-Activity 2.2.Development of selection criteriafor two pilot public/municipal buildings:
Sub-Activity 2.3. Carrying-out the selection of the two pilot municipal/public buildings;
Sub-Activity 2.4. Conducting energy audits in order to identify relevant and suitable renewable energy and energy efficiency measures for each pilot municipal/public buildings;

At the first meeting after its establishment the S/MCEECGwill launch aconsultationprocess to identify target municipal/public buildings stock for developing of long list. .
Based on local political agenda, SE(C)AP coverage, also ensuring high visibility and benefits for local population S/MC will identify priority building stoke, from where pilot two buildings will be selected. While developing priority building stoke preference to the social/education/health infrastructure rather than administrative buildings.

Selection criteria'sand procedure (included selection committee, if needed) will be established by the S/MC. The selection criteria may include the following: site location, climate conditions, type/status of (municipal/public) building, number and social status of beneficiaries/users, cost of project and pay-back period of the investment, economic benefits in terms of reduced expenditure for consumed energy, environmental benefits in terms of reduced emissions of CO2, and other.

The selection of the two pilot municipal/public buildings will be carried out by the selection committee established by the S/MC or by the S/MC itself. As a result of the selection process two pilot municipal/public buildings will be selected.

After the decision is taken, the Energy Audit Expert will conduct energy audits for these selected two buildings in order to identify relevant and suitable renewable energy and energy efficiency measures. These energy audits shall also include considerations for different insulation measures and technologies including innovative solutions such ashybrid heating systems using agricultural waste (vineyard pruning residues) and natural gas as well as use of solar energy for in house hot waterand modernisation of ventilation systems by improving their energy performance and indoor environment.

Based on the information provided in the energy audits, the project team will assess the cost effectiveness of specific renewable energy and energy efficiency measures,estimate energy savings and GHG emission reductions (T/Year)derived from each measureto ensure the optimal solution in terms of energy performance and indoor comfort of the building. In addition the energy audits will identify the investments needed, Net Savings,, Investment Lifetime, Payback Periods,Internal Rate of Return, and etc.

Outputsof Activity 2:
Output 2.1Long list of identified potential municipal/public buildings Stock is developed;
Output 2.2: Developed selection criteria for (2) two pilot municipal/public buildings;;

Output 2.3: Two pilot municipal/public buildings are selected, brief description of each of the selected municipal/public buildings, available selection process related and decision documents (such as minutes of the meetings, materials, composition of selection committee (if any), decision, etc.);
Output 2.4: Two (2) energy audits for selected (2) two pilot municipal/public buildings.

Activity 3: Complete thermo-modernization of two selected pilot municipal/public buildings by applying sustainable clean energy and energy efficiencytechnologies and use of local renewable energy resources
Sub-Activity 3.1. Based on energy audits to develop relevant architectural-engineering drawings/designs needed for complete thermo-modernization of the two pilot buildings (walls, roof/attic, basement/floor, windows & doors, etc.)
Sub-Activity 3.2. Developing relevant technical designs for implementation of modernized renewable energy heating systems using agricultural waste (vineyard pruning residues) and with consideration of solar energy for domestic hot water heating system;
Sub-Activity 3.3. Developmentof relevant technical designs for new ventilation systems, which shall improve energy efficiency and indoor environment of the selected pilot buildings;
Sub-Activity 3.4. Preparation of all necessary tender documentationsfor architectural-engineering, technical design, other services and subsequent supply and works contracts in relation to thermos-modernization of the two selected pilot buildings;
Sub-Activity 3.5. Tendering and signature of the services, works and supply contracts with the selected companies and providers in relation to thermo-modernization of the two selected pilot buildings.

This activity requires detailed planning that implies to elaboration of relevant architectural-engineering projects, procurement documents, tendering, and construction works. At the beginning ECCG in cooperation with target municipality and based on S/MC will start the preparation of tender documents for developing of relevant architectural-engineering projects related to the implementation of all renewable energy and energy efficiency measures, as well as announcing the procurement of necessary equipment and performance of the works. All process started from preparation of all necessary tender documentation till procurement procedures and performance of the works will be conducted according to the national and EU rules as defined in the Grant Contract.

The detailed procurement plan will be developed at the beginning of the project and discussed at the S/MC.

Outputsof Activity 3:

Output 3.1:Tender documentations for architectural-engineering, technical design for building thermo-modernisation and building engineering systems are prepared;
Output 3.2: Architectural-engineering drawings/designs needed for complete thermo-modernization of the two pilot buildings (walls, roof/attic, basement/floor, windows & doors, etc.), are prepared;
Output 3.3: Technical designs for implementation of modernized renewable energy heating systems using agricultural waste (vineyard pruning residues) and with consideration of solar energy for domestic hot water heating system are developed;
Output 3.4: Technical designs for new ventilation systems, which shall improve energy efficiency and indoor environment of the selected pilot buildings, are developed;
Output 3.5: Tender documentationssubsequent supply and works contracts in relation to thermos-modernization of the two selected pilot buildings is prepared;

Activity 4: Establishment of renewable energy (biomass) supply chain in pilot Georgian CoM municipality;

Sub-Activity 4.1. Based on biomass energy potential identified in SE(C)AP's and needs assessed during the Energy Audit development prepare necessary procurement documentation for development of tech. specification for warehouse building, technical parameters for the tools and machinery needed for biomass supply chain as well as engineering drawings/designs needed for proper operation of the biomass warehouse.

Sub-Activity 4.2.Developing relevant technical designs for tech. specification of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass warehouse and machinery needed for biomass supply chain.

Sub-Activity 4.3.Identify the building to be used for warehouse from the relevant municipal building stock;

Sub-Activity 4.4 procurement documentation for supply and works for equipping of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass chain.

Sub-Activity 4.5. Identify the vine-growing farms, which could participate in the long-term supply system of vineyard pruning residues as a renewable energy source;
Sub-Activity 4.6. Establishment biomass network and/or associationwith locally administration and local private sectorin order to ensure long-term sustainability of biomass supply chain;

In order to ensure long-term supply of biomass () and facilitate its use over the region, EECG in cooperation with the target municipality will identify local vine-growing farms (private companies/limited liability companies and/or individual farmers), promote to them and negotiate regarding their involvement in the biomass supply chain by providing target municipality and/or two selected pilot buildings with agricultural wastes (vineyard pruning resides).
The interested farms through expressions of interest will become members of so-called Locally Based Biomass Network aiming for sustainable and long-term supply of renewable energy (biomass) chain for the pilot two buildings and subsequently within these municipalities. Another aim of the creation of such a network is promotion of the cooperation between public and private sectors and identification of raw biomass providers.
For ensuring affective establishment and operation of renewable energy (biomass) supply chain among stakeholders (municipality, municipal agencies, farms and/or companies, EECG) will be discussed/considered2 possible options:

- Option 1: after consultations with Municipal decision makers and as of decision of S/MC identification of municipal agencies (e.g. union of kindergarten) and responsible for operation of biomass supply chain . In particular identified municipal entity will be responsible for collecting raw materials from the fields, transportation to the warehouse, processingchip productions through shredding and supply to the final users. The role for agro farms will be defined by MOM and will be limited in providing to access totheagricultural restudies
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- Option 2: Newly established association - composed of municipality/ municipal subsidiary and agro farmers. Association will predefine roles and functions for each of its member and shall have joint responsibility ineffective utilizationlocally available biomass potential utilization. Legal form of Association will be defined during the consultation. Thought the project aim of the Association will be collecting raw materials from the fields, transportation processing of chip productions through shredding, its storing to the warehouse and supply to the final consumers.
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- In both cases ownership of all purchased assets (equipment/machinery and/or tools *(1 unit of tractor for collecting and processing of biomass residues on the field; 1 unit vehicle for transportation of agriculture waste from fields to warehouse and from the warehouse to the end users; 1 unit shredder; 2 unit conveyer, 1 unit loader, 1 unit packaging machine & other minor machinery/equipment's needed for reliable operation of biomass supplychain as well as for operation of warehouse)* will be transferred to the municipality and or to its subsidiary

  EECG will be involved in development of sustainable supply chain.

The decision on the best option will be madeby SM/C during the project implementation.
As of consultations during the proposal preparation stage Telavi authorities committed to allocate warehouse placed in Tsinandaly village to be used as biomass warehouse.
Sub-Activity 4.4 procurement documentation for supply and works for equipping of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass chain.

Sub-Activity 4.5. Identify the vine-growing farms, which could participate in the long-term supply system of vineyard pruning residues as a renewable energy source;

Sub-Activity 4.5. Establishment biomass network and/or association with locally administration and local private sector in order to ensure long-term sustainability of biomass supply chain;

Outputs of Activity 4:

Output4.1: Tender documents for development of tech. specification for warehouse building, technical parameters for the tools and machinery needed for biomass supply chain as well as engineering drawings/designs needed for proper operation of the biomass warehouse are developed;
Output 4.2: Technical designs of warehouse building, as well as specifications and tech parameters for tools/machinery and equipment'sare developed;
Output 4.3: Warehouse building is selected (As of consultations during the proposal preparation stage Telavi authorities committed to allocate warehouse placed in Tsinandali village to be used as biomass warehouse.)
Output 4.4.Relevant service, works and supply contracts with the selected companies and providers are signed.
Output 4.5.Locally based biomass network between public and private sector is established ensuring long-term supply chain of the renewable biomass;

Activity 5: Capacity Building and Awareness Raising Campaigns
Sub-Activity 5.1. Development of all necessary presentations and materials for capacity building of local decision makers and staff of beneficiary organizations to present them findings and benefits of performed sustainable energy investments projects and provide relevant training/seminars (operation & maintenance of various renewable energy/energy efficient installations);
Sub-Activity 5.2.Delivery of capacity building training and seminars;
Sub-Activity 5.3. Conducting awareness raising campaigns (Sustainable Energy Weeks/Days);
Sub-Activity 5.4.Developmentof necessary communication materials for both local decision makers (to replicate the project in other sites), and public at large including informational leaflets, brochures, posters etc.

The capacity building activity is considered as one of the keytasksof this Action.In order to improve technical and management capacities of target groups (municipality staff) and direct beneficiaries (staff of selected public/municipal buildings) as well as ensure proper maintenances of newly installed renewable energy and energy efficiency technologies, the EECG will provide capacity building training and seminars. This activity is important because

the awareness and knowhow of the local population on use and maintenance of these technologies is very low and should be improved to ensure the sustainability of the Action.

Aiming to raise public awareness of local population (adults, children) Sustainable Energy Days/Weeks will be organized aiming to present and discussion sustainable energy policy with local communities and their involvement in the execution of municipality/city energy plans (SE(C)APs). For this activity EECG in cooperation with target municipalities will plan and organize Sustainable Energy Days/Weeks focusing on creation of links between local authorities and local society though various educational, cultural and/or sports activities.

In addition, the events related to the two pilot building thermos-modernization (launching, closer, etc.) will be organized. The information on these two pilot building thermos-modernization will be disseminated during Sustainable Energy Days/Weeks ensuring awareness raising among local communities and visibility of the Action.

EECG in cooperation with target municipalities will determine the structure, schedule, and locations of awareness raising events. The awareness raising events will be conducted annually (as a part of EU Sustainable Energy Week) throughout Action implementation. Within the Action different information materials (presentations, posters, brochures, leaflets, banner, stands) providing information about the Action (objectives, activities, results, benefits & etc.) will be developed. The mentioned activity will promote the dissemination of the Action activities not only locally (in target municipalities) but also throughout Georgia.

Also within this action Display® posters will be published to illustrate the standards of energy (electricity, water, NG & etc.) consumption from A class to G class and encouraging municipalities to publicly display environmental performance of their municipal/public buildings. EECG is a member of the European Campaign Display® with authority to develop and publish Display posters.

Outputsof Activity 5:

Output 5.1. Presentations and materials for capacity building of local decision makers and staff of beneficiary organizations to present to them findings and benefits of performed sustainable energy investments projects and provide relevant training/seminars (operation & maintenance of various renewable energy/energy efficient installations) are available;
Output 5.2. Capacity building training and seminar materials, evaluation forms, et.c. available;
Output 5.3. Capacity Building report;
Output 5.4. Various events of awareness raising campaigns (Sustainable Energy Weeks/Days) organised and relevant materials (reports, photos, media coverage reports, etc.) are available;
Output 5.5.Published communication materials including informational leaflets, brochures, posters etc.

Activity6: Information Dissemination and Visibility of the Action
Sub-Activity 6.1. Organisation of the official project events (kick off, launch, opening, closing ceremonies)
Sub-Activity 6.2. Dissemination of the information on project activities via various social networks;
Sub-Activity 6.3. Participation in annual national and/or international conferences (at least 3) held annually in Georgia to present project progress and project outcomes;
Sub-Activity 6.4. Promote the project activities and results during CoM events in Georgia and other ENPI countries.

In order to ensure the information dissemination and visibility activities and results under this Action a number of project events will be organised (kick off, opening, closing, etc.). Such events will be also part of the Sustainable Energy Day which will be widely covered by local and central media sources. Representatives of donor organizations, representatives from other CoM cities as well as neighbouring municipalities and all other stakeholders will be invited to such

official events. In the course of the implementation of sustainable investment projects the central and local media will be invited to the pilot building sites
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Under this Action adocumentary movie will be developed featuring all process related to the implementation of the sustainable investment projects in the two selected pilot buildings from the beginning till its completion. More specifically in this movie the situation before and after thermos-modernization will be demonstrated.

The dissemination and visibility of the Action will be ensured using various information channels: web-pages, face-book page of lead applicant as well as co-applicants, etc. In addition, the relevant stands/boards will be placed at the entrances of the selected pilot buildings containing the information about implemented activities, project partners and donors.

For visibility of the Action EECG will also present the Action (its objectives, activities, results, benefits & etc.) at various national and/or international events (at least 3 events) dedicated to the sustainable energy issues.

Outputs of Activity 6:
Output 6.1:Official project events taken place and relevant documents are available (such as press realises, agendas, lists of participants, photos, videos, media coverage reports;
Output 6.2: Short documentary movie about implementation of the project;
Output 6.3: Information disseminated through web-pages and face-book pages (links) and other information channels;
Output 6.4: Presentations and photos of the events reflecting the participation of project team (coordinator, manager) in different national and international events and promoting the results of this Action.

Activity 7: Performance, monitoring and commissioning of sustainable investment projects.
Sub-Activity 7.1.Performance, monitoring and supervision of thermos-modernization of the two selected pilot buildings and relevant equipment installation;
Sub-Activity 7.2. Development of operation & maintenance guidelines taking into consideration requirements for application of newly installed renewable energy and energy efficient *technologies in line with supplier recommendations;*
Sub-Activity 7.3. Testing and handover of completely modernized two selected pilot buildings to beneficiary organizations.
Sub-Activity 7.4. Conducting tailor made training/seminars for beneficiary organizations on operating and maintenance of newly installed renewable energy and energy efficient *technologies.*
EECG in cooperation with target municipalities will oversee and manage the thermos-modernization process of the two selected pilot municipal/public buildings. In case the lead applicant and/or co-applicant as members of Steering/Management Committee will face some difficulties and/or gaps in the installation process of renewable energy and energy efficient technologies and/or works, it is expected that the sides will inform on this each other so that appropriate measures are taken on time.

After the completion of the sustainable energy investment projects in selected pilot buildings EECG will develop the operation & maintenance guidelines taking into consideration requirements of installed applications/technologies and supplier recommendations. Also, EECG in cooperation with suppliers will provide information during seminars/training on installed renewable energy and energy efficient technologies for the direct beneficiaries in order to ensure their proper maintenances.

EECG will evaluate renewable energy and energy efficient measures in the selected two pilot municipal/public buildings and develop a document “lessons learned” in the implementation of renewable energy and energy efficient improvements in each target municipalities; all installed renewable energy and energy efficient technologies will be tested before putting them into

operation and only after that at the hand-over document to direct beneficiary organizations including warranty period for the equipment installed and works performed by the by the supplier.

Outputs of Activity 7:
Output 7.1:two selected pilot building thermos-modernization site supervision monitoring reports, monitoring and supervision related documents;
Output 7.2: Operation & maintenance guidelines for installed equipment;
Output 7.3: Signed Acts of the Acceptances on performed works, including warranty documentation for the two modernised selected pilot buildings;
Output 7.4: Tailor made training/seminars incorporating "lessons learned" during two selected pilot building thermos-modernizationin each target municipalities delivered and relevant documents available.

2. Methodology

Below proposed methods and methodologies will ensure smooth implementation of the Action activities and support the CoM signatories (self-governing community Telavi & self-governing Telavi City) from Kakheti region to fulfil the commitments of the CoM policy and implement SEAPs.

Activity 1

S/MC will be established to ensure timely provision of information to all members concerning the implementation of the Action and discuss as well as find way to overcome any difficulties. The S/MC will meet every 3-4 months.
In order to ensure good functioning of the project team, for each member job description defining tasks and responsibilities within Action will be developed and contracts signed with each member of the project team. The project team will be made up from5 EECG experts, in particular: Project Manager, Project Coordinator; Expert in Energy Auditing for Investment/Pilot Projects; Expert on Investment project for Buildings and Communication & Dissemination Expert. Detailed roles and tasks of the project team members are described below.

Activity 2

This activity covers the selection of municipal pilot sites/buildings in target sites. The availability of SEA(C)Ps in pilot municipalities allows the project team in consultation with co-applicants to identify the most attractive options for investment. Clear and transparent selection criteria will be defined. The final decision will be made by co-applicants.
For selected sites the energy audits will be performed with the utilization of the Norwegian ENSI Energy Performance (EAP) and Profitability software (http://www.ensi.no/index.php?sideID=97). Itis user-friendly tool for calculating the energy performance of buildings and the profitability of all energy efficiency and renovation measures separately and in packages. The software is suitable for energy auditing of new and existing buildings and for building certification as well. The software gives the opportunity to identify relevant RE and EE measures as well as the cost benefit analyses indicators. EECG is an authorised user of both softwares in Georgia and performs all energy audits using this tool. The energy audits will be conducted by qualified energy auditor(s) with technical-engineering background several years of relevant work experience.

Activity3

Unfortunately the majority of public/municipal buildings in Georgia due to high heat losses from building structures are in need of full thermal insulation and modernization. The existing practice for rehabilitation of public/municipal buildings, due to budget constraints and existing procurement practices, covers some repairs, ideally replacement of windows and doors with double glazed PVCs, which is far less than needed energy efficient improvements. That's why only part of EE measures is envisaged in the building sector of Georgian SE(C)APs instead of full thermo-modernization of buildings.

The proposed full thermo-modernization of the buildings with consideration of clean energy technologies (biomass) will give an opportunity to see tangible benefits from energy efficiency and renewable energy measures in terms of energy & money saving, improvement of indoor environment as well as health and environmental conditions.

Activity 4

In order to promote implementation of mentioned adaption measure (agriculture waste management) as well as to achieve long-term supply of biomass as a renewable energy source, EECG will identify vine-growing farms and/or companies for supplying and/or producing the chips from vineyards' pruning resides as an energy source. All interested local companies and/or farms will be offered involvement in the process of network establishment which will be made up of representatives of public/municipal and private sectors. The collaboration between sectors will be confirmed by signing the memorandum of cooperation. After this, members of the network will start working on identification of service provider which will work out a scheme (collection, shredding, transportation) necessary for the long-term biomass supply to the selected pilot sites.

It should be noted that EECG has experience in the promotion of biomass (hazelnut shells) production and utilization as an energy source in (west) Georgia. More specifically, in 2015 EECG implemented the project (funded by British Petroleum to Georgia), which envisaged the introduction of autonomous heating system working on the solid fuel – agricultural residues which are common for Zugugidi municipality (CoM signatory); for more information visit: http://eecgeo.org/en/project_BP_new.htm.

Another relevant project (financed by UNDP Georgia) is Feasibility Study for testing approaches to reducing fuel wood demand within the support zone areas of Machakhela National Park in Adjara region of Georgia and Implementation of the Action Plan for Undertaking Field Testing of Selected Technical Solutions in Machakhela National Park Support Zone villages; for more information visit: http://eecgeo.org/en/project_Machakhela2.htm;

Activity5

In order to raise the technical and management capacities of the direct beneficiaries *(municipality staff & staff of selected public/municipal buildings)*as well as ensure proper maintenances of installed RE & EE technologies EECG will provide the capacity building trainings/seminars. In addition, the handouts will be developed by qualified EECG experts and will be disseminated to the trainings/seminars participants. This activity is essential as an awareness/knowledge of local population on RE & EE technologies and its maintenance is low that needs to be raised for ensuring the sustainability of the installed technologies.

Also mentioned activity is dealing with conducting of awareness raising campaigns; more specific for awareness raising campaigns will be conducted/organized EU Sustainable Energy Days/Weeks that considered as one of the most popular and knowledgeable methodology bringing together state and local authorities, educational institutions, NGOs, businesses, and population (private consumers) to share and get information about the best practices on sustainable energy policy including RE & EE technologies. EECG as a covenant supporter to Georgia has already 7-years' experience in organizing of awareness raising campaigns and most of them are being organized in cooperation with CoM cities. Accordingly, EECG in cooperation with target municipalities will determine a structure, a schedule, event scenarios, locations and etc. for ensuring its successful implementation. For awareness rising will be used different materials (brochures, leaflets, Display® posters and banner) through organization various educational, cultural and sporting events (seminars, trainings, competitions, exhibitions, performances, marathons &etc).

Activity 6

There will be used commissioning events that will be elucidated widely by central and local media sources; also for information dissemination will be used the web-pages as well asthe face-book pages of the direct beneficiaries. In addition for a better visibility and dissemination of

the Action activities' EECG as a covenant supporter to Georgia will present the Action's objectives, activities and results on different national and international conferences. EECG as a covenant supporter to Georgia is invited often to various local and international conferences to present its activities related to the sustainable energy policy in Georgia

Activity 7

The performance of the investment sustainable projects will be implemented according to national and EU standards ensuring highly performed works. All installed RE & EE technologies will be tested before their full ruining and only after that will be handed-over to direct beneficiary organizations with guarantee of warranty period of the technologies and/or performed works by the suppliers; also in order to ensure proper functioning and maintenance of the installed RE & EE technologies by direct(the staff of selected municipal buildings and municipalities) EECG in cooperation with suppliers will develop specific guidelines and provide an information seminars/trainings. The mentioned seminars/trainings will improve the technical & management capacities of the direct (staff of target municipalities, staff of selected municipal buildings) about EE & RE technologies including adaptation measures. For insuring high qualified trainings/seminars EECG will develop handouts supporting them to deep their knowledge for rising of technical and management capacities. At the end of completion of investments projects "the lessons learned" document will be developed that widely disseminated in target municipalities and other interested stakeholders.

Synergies with other initiatives:

First of all proposed Action is in synergy with "Covenant of Mayors East" project funded by EU Commission aiming to "introduce the EU climate and energy initiative to the Eastern Partnership countries and support local authorities in implementing sustainable energy policies, reducing their dependency on fossil fuels, improving the security of energy supply, and facilitates their contribution to climate change mitigation and adaptation":http://eecgeo.org/en/project_com_east.htm.

Also, the synergy isbuilt with current project "The Training and Certification of Private Sector Energy Auditors and Awareness Campaign for Energy Efficiency in Buildings" as well financed by the Danish Ministry for Foreign Affairs and DANIDA, and administered by the Nordic Environment Finance Corporation (NEFCO) promoting awareness campaigns dedicated to the six (6) CoM committed to energy efficiency in public buildings.

In general proposed Action supports implementation of commitments of CoM signatory cities of Georgia, through provision of technical and institutional support to local authorities; however, national authorities will be also involved in its implementation. They will be informed about needs and constrains identified in course of the Action implementation, that will help them, and especially the Ministry of Environment and Nature Resource Protection and Ministry of Energy, establish more favourable institutional environment for implementation energy efficiency measures not only CoM signatories but also at national level. For this purpose it is possible to mention the document "National Energy Efficiency Action Plan (NEEAP)" as strategy of energy policy as well as "the Intended Nationally Determined Contributions (INDCs)" as strategy of environmental policy. Also the Action will support with current UNDP project assisting Georgia in developing its first "National Renewable Energy Action Plan (NREAP)" implemented by EECG as a Covenant Supporter.

Acting as the Covenant Supporter to Georgia for years, EECG has developed relevant knowledge and skills that allows providing qualified methods/approaches in working with target cities/municipalities for implementation of the CoM obligations in the country. Also EECG has strong organizational abilities in implementing of demonstrations projects at the municipal level. The activities of the Action are planned step by step, where each next action is a follow-up of the previous one. Such an approach not only moves the project forward but also activates the works in all directions. This approach appears to be a good basis for qualitative assessment for evaluation of overall project performance. Accordingly, the proposed approach within the Action allows replication of provided activities to other regions of Georgia as well after the completion of the Action.

The Action calls various elements needed to implement it. Some, but not all of these include: contractors, equipment needed for implementation of sustainable energy investments projects, local travel& per-diems, printing (brochures, leaflets, banner, posters etc), event facilities;office facilities, office equipment, and office supplies. Also various materials and various attributes (t-shirts, caps, &etc) needed for capacity building events and awareness rising events.

The stakeholders in the project are divided into Direct Beneficiaries and IndirectBeneficiaries: The Direct Beneficiaries of the Action are decision makers, municipal services of local authorities of self-governing Community Telavi & self-governing City Telavi (as co-applicants of the Action) as well as the beneficiaries of specific (selected) retrofitted buildings.

Indirect Beneficiaries of the Action are private companies; more specific agro vine (vine-growing) farms and/or companies providing their agricultural wastes (vineyards' pruning resides) to the municipalities as an energy source. Accordingly, the Action will improve the situation of the direct beneficiaries by several directions and/or arrangements. The Final Beneficiaries of the Action are citizens of target municipalities that will eventually all profit from better and affordable public services that will contribute to improved social and economic conditions.

Obviously, the project's beneficiaries are very interested in the Action as it supports the Georgian CoM signatory cities/municipalities to achieve the local sustainable energy policy through investment projects in line with their SE(C)APs. Final consumers (dwellers of city/municipality participants of the project) are also strongly motivated to support the project due to the economic benefits against baseline obtained from implementation of the Action (all RE & EE measures provided for SE(C)AP, raised technical and management capacities of direct beneficiaries, and other activities within the Action framework are pursuing the ultimate goal of improving energy efficiency, and consequently, reducing expenditures on property maintenance and CO2 emission).

In accordance with the Action's activities, the primary dissemination activities to enhance visibility include: the execution of Sustainable Energy Days/Weeks which will be designed and organized in the 2 project cities at 3 points in the project; presentations of the action activities project at national & international conferences as well as through information sources such as leaflets, brochures, web-sites, networking via the national, private structures and local authorities through regular publication of information on the web-sites and Face-book Pages of EECG and pilot cities. Finally, communication expert will be mobilized to ensure the municipal and national visibility of the project, its results and the CoM initiative as strong and consistent media coverage on the progress is essential to raising awareness of society throughout Georgia.

3. Indicative action plan for implementing the action

The action plan will be drawn up using the following format:
Please, see below

Year 1

	Half-year 1						Half-year 2						
Activity	Month 1	2	3	4	5	6	7	8	9	10	11	12	Implementing body
Activity 1: General Coordination & Management													
a. Coordination of the Action: development of cooperation agreements/memorandums (if needed), establishment of the partner roles between lead applicant & co-applicants in terms of the activities, outputs and deadlines, organization and facilitation of contacts among all involved participants;													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
b. Day-to-day management of the Action including ongoing identification of issues and deadlines, monitoring and team building, providing access to documents, providing co-applicants with administrative and financial information, ensuring on-time and proper payments to the Action participants (private companies/suppliers), organization of steering/management committee meetings;													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
c. Monitoring and evaluation of process and progress of the overall Action as outlined in the grant application and to be supplied steering/management committee members and development of Action summary updates (lead applicants, co-applicants).													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
d. Staffing, development of detailed job descriptions, signing contracts with project staff and elaboration of the detailed project work plan;													Lead Applicant/EECG;
f. Site visits and meetings with co-applicants and establishment of Steering/Management Committee.													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
Activity 2: Selection of two pilot municipal/public buildings in consultations with co-applicants and performance of their energy audits													**Implementing body**

a:Identification of target municipal/public building stock.													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
b.Development of selection criteria for two pilot public/municipal buildings:													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
c. Carrying-out the selection of the two pilot municipal/public buildings;													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
d. Conducting energy audits in order to identify relevant and suitable renewable energy and energy efficiency measures for each pilot municipal/public buildings;													Lead Applicant/EECG;
Activity 3: Complete thermo-modernization of two selected pilot municipal/public buildings by applying sustainable clean energy and energy efficiencytechnologies and use of local renewable energy resources													**Implementing body**
a. Based on energy audits to develop relevant architectural-engineering drawings/designs needed for complete thermo-modernization of the two pilot buildings (walls, roof/attic, basement/floor, windows & doors, etc.)													Lead Applicant/EECG; with support of Co-applicant; Local Suppliers
b.Developing relevant technical designs for implementation of modernized renewable energy heating systems using agricultural waste (vineyard pruning residues) and with consideration of solar energy for domestic hot water heating system;													Lead Applicant/EECG; with support of Co-applicant; Local Suppliers
c. Development of relevant technical designs for new ventilation systems, which shall improve energy efficiency and indoor environment of the selected pilot buildings;													Lead Applicant/EECG; with support of Co-applicants; Local Suppliers
d. Preparation of all necessary tender documentationsfor architectural-engineering, technical design, other services and subsequent supply and works contracts in relation to thermos-modernization of the two selected pilot buildings;													

f.Tendering and signature of the services, works and supply contracts with the selected companies and providers in relation to thermo-modernization of the two selected pilot buildings.													
Activity 4: Establishment of renewable energy (biomass) supply chain in pilot Georgian CoM municipality;													**Implementing body**
a. Based on biomass energy potential identified in SE(C)AP's and needs assessed during the En.Audit development prepare necessary procurement documentation for development of tech. specification for warehouse building, technical parameters for the tools and machinery needed for biomass supply chain as well as engineering drawings/designs needed for proper operation of the biomass warehouse.													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
b. Developing relevant technical designs for tech. specification of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass warehouse and machinery needed for biomass supply chain.													Lead Applicant/EECG; Co-Applicants/Telavi Municipality; Supplier
c. Identify the building to be used for warehouse from the relevant municipal building stock;													Lead Applicant/EECG; Co-Applicants/Telavi municipality
d.procurement documentation for supply and works for equipping of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass chain.													Lead Applicant/EECG; Co-Applicants/Telavi municipality; Supplier
f. identify the vine-growing farms, which could participate in the long-term supply system of vineyard pruning residues as a renewable energy source;													Lead Applicant/EECG; Co-Applicants/Telavi Community & Telavi Municipality; Local Farms and/or Companies
g. Establishment biomass network and/or associationwith locally administration and local private sectorin order to ensure long-term sustainability of biomass supply chain;													Lead Applicant/EECG; Co-Applicants/Telavi municipality; Local Farms and/or Companies

Activity 5: Capacity Building and Awareness Raising Campaigns													**Implementing body**
a. Development of all necessary presentations and materials for capacity building of local decision makers and staff of beneficiary organizations to present them findings and benefits of performed sustainable energy investments projects and provide relevant training/seminars (operation & maintenance of various renewable energy/energy efficient installations);													Lead Applicant/EECG;
b. Delivery of capacity building training and seminars;													Lead Applicant/EECG;
c. Conducting awareness raising campaigns (Sustainable Energy Weeks/Days)*(Determine structure,schedule, and location of the Sustainable Energy Days;Develop/Adapt/translate materials as needed; Arrange logistics (equipment, personnel participation etc.) for Sustainable Energy Days/Weeks; Execute Sustainable Energy Days/Weeks (in each year of the Action duration); Develop report of feedback from Sustainable Energy Days/Weeks)*													Lead Applicant/EECG;
i. Development of necessary communication materials for both local decision makers (to replicate the project in other sites), and public at large including informational leaflets, brochures, posters etc.													Lead Applicant/EECG;
Activity 6: Information Dissemination and Visibility of the Action													**Implementing body**
a. Organisation of the official project events (kick off, launch, opening, closing ceremonies)													Lead Applicant/EECG;Telavi Municpality
b.Dissemination of the information on project activities via various social networks;													Lead Applicant/EECG; EECG; Co-Applicants/Telavi municipality
c.Participation in annual national and/or international conferences (at least 3) held annually in Georgia to present project progress and project outcomes;													Lead Applicant/EECG;
d. Promote the project activities and results during CoM events in Georgia and other ENPI countries;													Lead Applicant/EECG; Co-Applicants/Telavi Community & Telavi City
Activity 7: Performance, monitoring and commissioning of sustainable investment projects.													**Implementing body**

a. . Performance, monitoring and supervision of thermos-modernization of the two selected pilot buildings and relevant equipment installation;													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
b. Development of operation & maintenance guidelines taking into consideration requirements for application of newly installed renewable energy and energy efficient technologies in line with supplier recommendations													Lead Applicant/EECG;
c. Testing and handover of completely modernized two selected pilot buildings to beneficiary organizations.													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
d. Conducting tailor made training/seminars for beneficiary organizations on operating and maintenance of newly installed renewable energy and energy efficient technologies.													Lead Applicant/EECG;

Year 2

	Half-year 1						Half-year 2						
Activity	Month 1	2	3	4	5	6	7	8	9	10	11	12	Implementing body
Activity 1: General Coordination & Management													
a. Coordination of the Action: development of cooperation agreements/memorandums (if needed), establishment of the partner roles between lead applicant & co-applicants in terms of the activities, outputs and deadlines, organization and facilitation of contacts among all involved participants;													Lead Applicant/EECG; Co-Applicants/Telavi municipality
b. Day-to-day management of the Action including ongoing identification of issues and deadlines, monitoring and team building, providing access to documents, providing co-applicants with administrative and financial information, ensuring on-time and proper payments to the Action participants (private companies/suppliers), organization of steering/management committee meetings;													Lead Applicant/EECG; Co-Applicants/Telavi municipality
c. Monitoring and evaluation of process and progress of the overall Action as outlined in the grant application and to be supplied steering/management committee members and development of Action summary updates (lead applicants, co-applicants).													Lead Applicant/EECG; Co-Applicants/Telavi municipality
d. Staffing, development of detailed job descriptions, signing contracts with project staff and elaboration of the detailed project work plan;													Lead Applicant/EECG;
f. Site visits and meetings with co-applicants and establishment of Steering/Management Committee.													Lead Applicant/EECG; Co-Applicants/Telavi municipality
Activity 2: Selection of two pilot municipal/public buildings in consultations with co-applicants and performance of their energy audits													**Implementing body**
a:Identification of target municipal/public building stock.													Lead Applicant/EECG; Co-Applicants/Telavi municipality
b.Development of selection criteria for two pilot public/municipal buildings:													Lead Applicant/EECG; Co-

													Applicants/Telavi municipality
c. Carrying-out the selection of the two pilot municipal/public buildings;													Lead Applicant/EECG; Co-Applicants/Telavi municipality
d. Conducting energy audits in order to identify relevant and suitable renewable energy and energy efficiency measures for each pilot municipal/public buildings;													Lead Applicant/EECG;
Activity 3: Complete thermo-modernization of two selected pilot municipal/public buildings by applying sustainable clean energy and energy efficiencytechnologies and use of local renewable energy resources													**Implementing body**
a. Based on energy audits to develop relevant architectural-engineering drawings/designs needed for complete thermo-modernization of the two pilot buildings (walls, roof/attic, basement/floor, windows & doors, etc.)													Lead Applicant/EECG; with support of Co-applicant; Suppliers
b. Developing relevant technical designs for implementation of modernized renewable energy heating systems using agricultural waste (vineyard pruning residues) and with consideration of solar energy for domestic hot water heating system;													Lead Applicant/EECG; with support of Co-applicant; Suppliers
c. Development of relevant technical designs for new ventilation systems, which shall improve energy efficiency and indoor environment of the selected pilot buildings;													Lead Applicant/EECG; with support of Co-applicant; Suppliers
d. Preparation of all necessary tender documentationsfor architectural-engineering, technical design, other services and subsequent supply and works contracts in relation to thermos-modernization of the two selected pilot buildings;													Lead Applicant/EECG; with support of Co-applicant; Suppliers
f.Tendering and signature of the services, works and supply contracts with the selected companies and providers in relation to thermo-modernization of the two selected pilot buildings.													Lead Applicant/EECG; with support of Co-applicant; Suppliers
Activity 4: Establishment of renewable energy (biomass) supply chain in pilot Georgian CoM municipality;													**Implementing body**
a. Based on biomass energy potential identified in SE(C)AP's and needs assessed during the En.Audit development prepare necessary procurement													Lead Applicant/EECG; with support of Co-applicant

documentation for development of tech. specification for warehouse building, technical parameters for the tools and machinery needed for biomass supply chain as well as engineering drawings/designs needed for proper operation of the biomass warehouse.													
b. Developing relevant technical designs for tech. specification of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass warehouse and machinery needed for biomass supply chain.													Lead Applicant/EECG; with support of Co-applicant, Supplier
c. Identify the building to be used for warehouse from the relevant municipal building stock;													Lead Applicant/EECG; with support of Co-applicantLocal Farms and/or Companies
d. procurement documentation for supply and works for equipping of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass chain.													Lead Applicant/EECG; with support of Co-applicant; Local Farms and/or Companies
f. identify the vine-growing farms, which could participate in the long-term supply system of vineyard pruning residues as a renewable energy source;													Lead Applicant/EECG; with support of Co-applicant; Local Farms and/or Companies
g. Establishment biomass network and/or associationwith locally administration and local private sectorin order to ensure long-term sustainability of biomass supply chain;													Lead Applicant/EECG; with support of Co-applicant; Local Farms and/or Companies
Activity 5: Capacity Building and Awareness Raising Campaigns													**Implementing body**
a. Development of all necessary presentations and materials for capacity building of local decision makers and staff of beneficiary organizations to present them findings and benefits of performed sustainable energy investments projects and provide relevant training/seminars (operation & maintenance of various renewable energy/energy efficient installations);													Lead Applicant/EECG;
b. Delivery of capacity building training and seminars;													Lead Applicant/EECG;
c. Conducting awareness raising campaigns (Sustainable Energy Weeks/Days)*(Determine structure, schedule, and location of the Sustainable Energy Days; Develop/Adapt/translate materials as needed; Arrange logistics (equipment, personnel*													Lead Applicant/EECG; Co-Applicants/Telavi municipaity

participation etc.) for Sustainable Energy Days/Weeks; Execute Sustainable Energy Days/Weeks (in each year of the Action duration); Develop report of feedback from Sustainable Energy Days/Weeks)													
i. Development of necessary communication materials for both local decision makers (to replicate the project in other sites), and public at large including informational leaflets, brochures, posters etc.													Lead Applicant/EECG;
Activity 6: Information Dissemination and Visibility of the Action													**Implementing body**
a. Organisation of the official project events (kick off, launch, opening, closing ceremonies)													Lead Applicant/EECG; Co=applicant
b.Dissemination of the information on project activities via various social networks;													Lead Applicant/EECG; with support of Co-applicant
c.Participation in annual national and/or international conferences (at least 3) held annually in Georgia to present project progress and project outcomes;													Lead Applicant/EECG;
d. Promote the project activities and results during CoM events in Georgia and other ENPI countries;													Lead Applicant/EECG; Co-Applicants/Telavi Municipality
Activity 7: Performance, monitoring and commissioning of sustainable investment projects.													**Implementing body**
a. . Performance, monitoring and supervision of thermos-modernization of the two selected pilot buildings and relevant equipment installation;													Lead Applicant/EECG; with support of Co-applicant
b. Development of operation & maintenance guidelines taking into consideration requirements for application of newly installed renewable energy and energy efficient technologies in line with supplier recommendations													Lead Applicant/EECG;
c.Testing and handover of completely modernized two selected pilot buildings to beneficiary organizations.													Lead Applicant/EECG; with support of Co-applicant
d. Conducting tailor made training/seminars for beneficiary organizations on operating and maintenance of newly installed renewable energy and energy efficient technologies.													Lead Applicant/EECG;

Year 3

	Half-year 1						Half-year 2						
Activity	Month 1	2	3	4	5	6	7	8	9	10	11	12	Implementing body
Activity 1: General Coordination & Management													
a. Coordination of the Action: development of cooperation agreements/memorandums (if needed), establishment of the partner roles between lead applicant & co-applicants in terms of the activities, outputs and deadlines, organization and facilitation of contacts among all involved participants;													Lead Applicant/EECG; with support of Co-applicant
b. Day-to-day management of the Action including ongoing identification of issues and deadlines, monitoring and team building, providing access to documents, providing co-applicants with administrative and financial information, ensuring on-time and proper payments to the Action participants (private companies/suppliers), organization of steering/management committee meetings;													Lead Applicant/EECG; with support of Co-applicant
c. Monitoring and evaluation of process and progress of the overall Action as outlined in the grant application and to be supplied steering/management committee members and development of Action summary updates (lead applicants, co-applicants).													Lead Applicant/EECG; with support of Co-applicant
d. Staffing, development of detailed job descriptions, signing contracts with project staff and elaboration of the detailed project work plan;													Lead Applicant/EECG;
f. Site visits and meetings with co-applicants and establishment of Steering/Management Committee.													Lead Applicant/EECG; with support of Co-applicant
Activity 2: Selection of two pilot municipal/public buildings in consultations with co-applicants and performance of their energy audits													**Implementing body**
a:Identification of target municipal/public building stock.													Lead Applicant/EECG; with support of Co-applicant
b.Development of selection criteria for two pilot public/municipal buildings:													Lead Applicant/EECG; with

													support of Co-applicant
c. Carrying-out the selection of the two pilot municipal/public buildings;													Lead Applicant/EECG; with support of Co-applicant
d. Conducting energy audits in order to identify relevant and suitable renewable energy and energy efficiency measures for each pilot municipal/public buildings;													Lead Applicant/EECG;
Activity 3: Complete thermo-modernization of two selected pilot municipal/public buildings by applying sustainable clean energy and energy efficiencytechnologies and use of local renewable energy resources													**Implementing body**
a. Based on energy audits to develop relevant architectural-engineering drawings/designs needed for complete thermo-modernization of the two pilot buildings (walls, roof/attic, basement/floor, windows & doors, etc.)													Lead Applicant/EECG; with support of Co-applicantSuppliers
b. Developing relevant technical designs for implementation of modernized renewable energy heating systems using agricultural waste (vineyard pruning residues) and with consideration of solar energy for domestic hot water heating system;													Lead Applicant/EECG; with support of Co-applicantSuppliers
c. Development of relevant technical designs for new ventilation systems, which shall improve energy efficiency and indoor environment of the selected pilot buildings;													Lead Applicant/EECG; with support of Co-applicant; Local Suppliers
d. Preparation of all necessary tender documentationsfor architectural-engineering, technical design, other services and subsequent supply and works contracts in relation to thermos-modernization of the two selected pilot buildings;													Lead Applicant/EECG; with support of Co-applicantSuppliers
f.Tendering and signature of the services, works and supply contracts with the selected companies and providers in relation to thermo-modernization of the two selected pilot buildings.													Lead Applicant/EECG; with support of Co-applicantSuppliers
Activity 4: Establishment of renewable energy (biomass) supply chain in pilot Georgian CoM municipality;													**Implementing body**
a. Based on biomass energy potential identified in SE(C)AP's and needs assessed during the En.Audit development prepare necessary procurement													Lead Applicant/EECG; with support of Co-applicant

documentation for development of tech. specification for warehouse building, technical parameters for the tools and machinery needed for biomass supply chain as well as engineering drawings/designs needed for proper operation of the biomass warehouse.													
b. Developing relevant technical designs for tech. specification of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass warehouse and machinery needed for biomass supply chain.													Lead Applicant/EECG; with support of Co-applicant; Supplier
c. Identify the building to be used for warehouse from the relevant municipal building stock;													Lead Applicant/EECG; with support of Co-applicant supplier
d. procurement documentation for supply and works for equipping of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass chain.													Lead Applicant/EECG; with support of Co-applicant, Supplier
f. identify the vine-growing farms, which could participate in the long-term supply system of vineyard pruning residues as a renewable energy source;													Lead Applicant/EECG; with support of Co-applicant Local Farms and/or Companies
g. Establishment biomass network and/or associationwith locally administration and local private sectorin order to ensure long-term sustainability of biomass supply chain;													Lead Applicant/EECG; with support of Co-applicant Local Farms and/or Companies
Activity 5: Capacity Building and Awareness Raising Campaigns													**Implementing body**
a. Development of all necessary presentations and materials for capacity building of local decision makers and staff of beneficiary organizations to present them findings and benefits of performed sustainable energy investments projects and provide relevant training/seminars (operation & maintenance of various renewable energy/energy efficient installations);													Lead Applicant/EECG; with support of Co-applicant
b. Delivery of capacity building training and seminars;													Lead Applicant/EECG;
c. Conducting awareness raising campaigns (Sustainable Energy Weeks/Days)*(Determine structure, schedule, and location of the Sustainable Energy Days; Develop/Adapt/translate materials as needed; Arrange logistics (equipment, personnel*													Lead Applicant/EECG; with support of Co-applicant

participation etc.) for Sustainable Energy Days/Weeks; Execute Sustainable Energy Days/Weeks (in each year of the Action duration); Develop report of feedback from Sustainable Energy Days/Weeks)													
i. Development of necessary communication materials for both local decision makers (to replicate the project in other sites), and public at large including informational leaflets, brochures, posters etc.													Lead Applicant/EECG;
Activity 6: Information Dissemination and Visibility of the Action													**Implementing body**
a. Organisation of the official project events (kick off, launch, opening, closing ceremonies)													Lead Applicant/EECG; with support of Co-applicant
b. Dissemination of the information on project activities via various social networks;													Lead Applicant/EECG; with support of Co-applicant
c.Participation in annual national and/or international conferences (at least 3) held annually in Georgia to present project progress and project outcomes;													Lead Applicant/EECG;
d. Promote the project activities and results during CoM events in Georgia and other ENPI countries;													Lead Applicant/EECG;
Activity 7: Performance, monitoring and commissioning of sustainable investment projects.													**Implementing body**
a. . Performance, monitoring and supervision of thermos-modernization of the two selected pilot buildings and relevant equipment installation;													Lead Applicant/EECG; with support of Co-applicant
b. Development of operation & maintenance guidelines taking into consideration requirements for application of newly installed renewable energy and energy efficient technologies in line with supplier recommendations													Lead Applicant/EECG; with support of Co-applicant
c. Testing and handover of completely modernized two selected pilot buildings to beneficiary organizations.													Lead Applicant/EECG; with support of Co-applicant
d. Conducting tailor made training/seminars for beneficiary organizations on operating and maintenance of newly installed renewable energy and energy efficient technologies.													Lead Applicant/EECG;

4. Sustainability of the action

The proposed Action is sustainable as its realization will have long-term social-economic and environmental impact in terms of decreasing the expenditures on energy source comparing to the baseline, improving level of direct beneficiaries for many years ahead and having zero negative impact on the environment.

As presented proposal envisages the design, implementation and monitoring of sustainable energy investment projects in Georgian CoM city and municipality there is great possibility of replication of projects not only in similar communities but in other CoM municipalities as well including in the municipalities which are interested to join the CoM near future.

After the implementation of investment projects all interested stakeholders will have possibility to see installed EE technologies in the communities and estimate the economic and environmental benefits of these technologies. Also the proposed action will promote to use locally available energy source through installation of hybrid heating systems working both on locally available vineyards' pruning restudies and natural gas.
Besides implemented investments projects will contribute/serve to educate, promote and encourage innovative RE and EE technologies, applications and investments in sustainable energy development as well as implement a SE(C)APs in CoM signatory Georgian cities.

The project beneficiaries will also act as advocates for popularization of benefits of implemented Action, telling people in the community about the possibilities of saving energy & money with no harm to environment by introducing clean energy technologies. After these clean energy technologies are installed some of the community members can get further training in the operation and maintenance of the clean energy equipment thus creating for them some employment opportunities within the community.

The sustainability of protects is determined by the life-time of the introduced clean energy technologies and solutions which usually ranges 15-25 years. The monitoring reports will illustrate direct impacts of the installed equipment on beneficiaries' energy bills to set the basis for future national sustainable energy plans/strategies.

Project results, media coverage including illustrative materials will be broadly publicized via EECG, and target municipalities' web-sites as well asFacebook pagesto all interested stakeholders in order to learn about the project findings.These activities will promote to more wide application of RE& EE technologies throughout Georgia and in nearby countries.

During the implementation of the Action activities the following risks should be considered and the following corresponding mitigation measures are proposed

Project Risks

- Due to the upcoming local self-governmental elections possible staff changes in both upper and middle management of target municipalities (self-governing Telavi community, self-governing Telavi City). Mitigation: ECCG team will establish and maintain good inter-personal contacts, cooperate actively with new executive branch of local self-governments, and will establish along with local executive officials sustainable local energy policy based on CoM commitments less dependent on political changes;

- The announced local self-governmental reform which implies the cancellation of self-government status and unification of some municipalities (self-governing Telavi city & self-governing Telavi municipality).Mitigation: the announced reforms will not cause in-depth

changes in terms of local governance; consequently, mentioned reforms will not prevent successful implementation of the Action.

- The potential for successful implementation of the CoM initiative through development and implementation of SE(C)APs is based on the independence of local authorities to act. This is not the situation in Georgia. Energy issues are primarily viewed from the point of view of the centralized supply side, while innovative solutions come from the decentralized demand side. Mitigation: Existing contacts (EECG as Covenant Supporter to Georgia has quite good contacts with Ministry of Energy as well as Ministry of Environment as National Coordinators to Georgia) established with national administrations with objective to facilitate the CoM implementation. Moreover, the state administrations (Ministry of Energy of Georgia and/or Ministry of the Environment of Georgia) fully support the implementation of energy efficiency policy in Georgia; it is possible to confirm with recently developed of the National Energy Efficiency Action Plan (NEEAP), which will be approved in the nearest future by the Government of Georgia. Also the document “Intended Nationally Determined Contributions (INDCs)” as strategy of environmental policy RE & EE measures are important instrument/tools for promoting of GHG emission reduction.

- Interruption and/or delay of the co-financing of sustainable energy investment projects due to the political unrest (upcoming Local Government Elections in October 2017) from side of target municipalities. Mitigation: The solution is that in local budget for 2018 allocation of funds for co-financing have been foreseen; In addition, currently, the Building Energy Efficiency Law is in the process of the development where is envisaged the energy performance improvements during the capital repairs of the public/municipal buildings.

- EU tender procurement procedures requested for EU-funded projects; more specific, RE &EE applications/technologies for sustainable energy investment projects have to be purchased as well as implemented in accordance with EU tender procedures which means that all mentioned applications have to be produced in EU countries and/or licensed in non EU countries. Mitigation: EECG already has experience to realize sustainable energy demonstration/investment projects in accordance with EU procedures and standards; the example of this is the implemented project:”Covenant of Mayors Capacity Building Model for Ukraine and Georgia: Model Solution for Eastern Partnership and Central Asian Countries’ funded by EU Commission in 2012-15 years (http://eecgeo.org/en/project_como.htm);

- Subsidizing gas tariffs that could cause the reducing of economic attractiveness to use the agricultural waste as biomass energy. Mitigation: Currently, the National Renewable Energy Action Plan/NREAP is under the process of development where is included the encouraging incentives for using of renewable energy sources in Georgia;

- After local self-governmental elections (after 21 October, 2017), the newly elected local government might change priorities in terms of co-financing; Mitigation: Currently, the Building Energy Efficiency Law is in the process of the development where is envisaged the energy performance improvements during the capital repairs of the public/municipal buildings.

5. Logical Framework

NOTE: RE Activity 2.3-energy auditing of buildings and related budget for implementation of recommended EE/RE improvements of selected pilot sites.

As previous experience in implementation of CoMDeP projects in Georgia revealed inconsistency with energy audit report and recommended measures with the views on those issues of the "Support Team", the presented proposal doesn't specify either RE/EE measures or their cost. These tasks will be specified in cooperation with Support Team and relevant budget developed.

	Results chain	Indicators	Baseline (incl. reference year)	Current value Reference date	Targets (incl. reference year)	Sources and means of verification	Assumptions
	To enhance Georgian CoM signatory cities/municipalities capacities in climate change mitigation and fulfillment of sustainable local energy policy through implementation of investment projects in line with their SE(C)APs;	Climate change mitigation processes in Georgian CoM municipalities are fostered through municipal energy efficiency and renewable energy sources utilization	0 Baseline indicators will be defined in En.Audit reports for that particular buildings	0 Baseline indicators will be defined in En.Audit reports for that particular buildings	Meeting CoM commitments. At least 20% reduction of GHG emission from pilot buildings	Ex-ante and ex-post comparison of municipal energy efficiency and renewable energy sources utilization's socio-economic sustainability; Project documentation.	Relevant governmental agencies are willing to establish more financial incentives to promote energy efficiency, renewable energy sources utilization
Specific Objectives (Outcomes):	**Oc 1**-Enhanced managerial and technical capacities of local authorities in target municipalities to transform SE(C)APs measures into investment projects and fulfill CoM commitments through implementation of Sustainable energy investment projectS;	At least 2 experienced staff within municipalityworking on energy efficiency issues	0 Municipality have no /experienced energy managers	0 Municipalityhav e no /experienced energy managers	At least 2 member of municipal staff have gainedexperienc ein identification, design and implementation of SECAP measures. And 2 buildings fully thermo-modernized	Duties and responsibilities assigned for 2 municipal staff and their involvement in day-today activities of the project. Periodic Monitoring reports; Minutes of M/SC meetings; reporting	On job training to the municipal staff will be provided during the project implementation; Based on trained personal municipal energy management unit will be created.

					through implementation of investment projects and biomass supply chain established		
	Oc2. Decreased dependence on imported fossil fuels & increased share of locally available RE source in final municipal energy consumption;	Amount of the sustainable biomass to be used in 2 pilot buildings will become main indicator	0 Agricultural waste is not used as fuel to replace NG or fuel wood	0 (Currently based on SEACPs municipal buildings consume 59,8 MWh energy (NG, fuel wood)	100 % of buildings heat and hot water demand will be satisfiedby renewable energy sources	monitoring reports, and Municipal energy bill	Establishment of sustainablebiomass supply chain may create favorable conditions for municipality and or other building owners to substitute fossil fuel and or unsustainable biomass (firewood) with agricultural bio waste and thus decrease own energy dependence and energy bill.
	Oc 2. Decreased dependence on imported fossil fuels & increased share of locally available RE source in final municipal energy consumption;	Energy consumption reduction in the 2 pilot buildings	Baseline will be defined after energy audit is conducted	Baseline will be defined after energy audit is conducted	At least 20% energy consumption reduction in 2 pilot buildings	Energy audit report, energy bills, other project reports	
	Oc.3 Raised awareness on benefits of clean energy technologies among interested stakeholders and public at large in target municipality and on a broader scale;	Raised awareness on benefits of clean energy technologies among interested stakeholders and public at large in target municipality and on a broader scale;	0	0	At least 500 Telavi citizens reached Published :300 leaflets; 300 brochures,	List of awareness rising activities/event participants and Project relevant reports	Upon project completion municipality will continue to produce EE/RE communication materials
OUTPUTS	**Outputs related to Oc.1** Output 1.1: Creation of project team and establishment the Steering/Management Committee and contract with the project staff signature;	S/MC establishment and employment contracts concluded;	0	0	1 S/MC established; 2 Project team established	MoU signed; Steering/Management Committee minutes; Job Descriptions and employment contracts	N/A

Output 1.2: Elaborated detailed work plan (timetable) for years 2018-2021;	Work Plan approved by S/MC	Proposal is available	Proposal is available	1	Work Plan and relevant S/MC minutes and Project report	N/A
Output 2.3: Two pilot municipal/public buildings are selected	Selection criteria approved and energy audits conducted	0	0	2 buildings selected	S/MC minutes and Project reports	N/A
Output 3.1: Tender documentations for architectural-engineering, technical design for building thermo-modernization and building engineering systems are prepared;	Tender docs developed and contracts signed	0	0	Technical architectural-engineering, technical design of: 2 building thermo-modernization 2 ventilation systems; 2 biomass based heating systems	Contract signed and tech designs	Separate docs for 2 pilot buildings
Output 3.5: Tender documentations subsequent supply and works contracts in relation to thermos-modernization of the two selected pilot buildings is prepared	Tender docs developed and contracts signed	0	0	Tender docs for: 2 building thermo-modernization 2 ventilation systems;	Contracts signed and tech designs	Separate docs for 2 pilot buildings

				2 biomass based heating systems		
Output 3.6: Relevant service, works and supply contracts with the selected in line with the EU requirements companies and providers in relation to thermo-modernization of the two selected pilot buildings are signed.	Contracts developed and signed	0	0	Concluded contracts for: 2 building thermo-modernization 2 ventilation systems; 2 biomass based heating systems	Contracts signed	Separate docs for 2 pilot buildings
Output 4.1: Tender documents for development of tech. specification for warehouse building, technical parameters for the tools and machinery needed for biomass supply chain as well as engineering drawings/designs needed for proper operation of the biomass warehouse are developed;	Tender docs developed and contracts signed	0	0	1	Contracts signed and tech designs	based on technical specifications of the building warehouse selection process will be launched
Output 4.3: Warehouse building is selected	Selected warehouse building	0	0	1	S/MC minutes on selection of warehouse based on technical specifications of the building warehouse;	As of consultations during the proposal preparation stage Telavi authorities committed to allocate warehouse placed in Tsinandaly village to be used as biomass warehouse

Output 4.4. Relevant service, works and supply contracts with the selected companies and providers are signed.	Contracts developed and signed	0	0	1	Contracts signed	Based on offers received project may conclude contract with one or more suppliers for different tools and machineries
Output 4.5. Locally based biomass network between public and private sector is established ensuring long-term supply chain of the renewable biomass;	Biomass supply Chain is established	0	0	1	Monitoring reports on amount of supplied & consumed biomass energy for 2 pilot buildings	Options for development of supply chain might be seen in Activity 4
Output 7.3: Signed Acts of the Acceptances on performed works, including warranty documentation for the 2 modernized selected pilot buildings;	Thermo-modernization of two pilot buildings is completed	0	0	2 buildings are thermos-modernized: Acts of the Acceptances for : 2 building thermo-modernization 2 ventilation systems; 2 biomass based heating system	Site super vision reports; Project reports; Signed Acceptance Acts.	EECG will request at least 1 year guarantee period for each measures. Ownership of all assets purchased within this project will be transferred to the municipality
Output 7.4: Tailor made training/seminars incorporating "lessons learned" during two selected pilot building thermos-modernization in each target municipalities delivered and relevant documents available	Pilot building operation and maintenance staff as well as biomass supply chain staff is trained	0	0	At least 6 persons trained	Training reports List of participants ;	Provided training will ensure smooth operation of RE & EE technologies both pilot building as well as biomass supply chain staffs

Outputs related to Oc.2 Output 2.4: Two (2) energy audits for selected (2) two pilot municipal/public buildings.	Energy and CO2 saving potential for pilot buildings identified	will be defined when the pilot buildings will be selected	will be defined when the pilot buildings will be selected	at least 20% of energy saving & CO2 emissions reduction	2 Energy Audit reports;	N/A
Output 3.6: Relevant service, works and supply contracts with the selected in line with the EU requirements companies and providers in relation to thermo-modernization of the two selected pilot buildings are signed.	Contracts developed and signed	0	0	Concluded contracts for: 2 building thermo-modernization 2 ventilation systems; 2 biomass based heating systems	Contracts signed	Separate docs for 2 pilot buildings
Output 4.5. Locally based biomass network between public and private sector is established ensuring long-term supply chain of the renewable biomass	Biomass supply Chain is established	0	0	1	Monitoring reports on amount of supplied & consumed biomass energy for 2 pilot buildings	Options for development of supply chain might be seen in Activity 4

Output 5.4. Various events of awareness raising campaigns (Sustainable Energy Weeks/Days) organised and relevant materials (reports, photos, media coverage reports, etc.) are available;	Amount of conduced awareness rising events and amount of target participants	0	0	At least 3 awareness rising events At least 500 Telavi citizens (adults, schoolchildren &etc) reached	Relevant event photos, media coverage,event reports, etc; List of event participants	
Sub-Activity 7.1. Performance, monitoring and supervision of thermos-modernization of the two selected pilot buildings and relevant equipment installation;	Monitoring & supervision reports	0	0	7 reports 1 biomass warehouse 2 thermo-modernization of buildings; 2 biomass based heating systems 2 ventilation systems	Act of acceptance; 2 fully modernized buildings;	Ownership of all assets purchased within this project will be transferred to the municipality

Outputs related to Oc.3) Output 5.1. Presentations and materials for capacity building of local decision makers and staff of beneficiary organizations to present to them findings and benefits of performed sustainable energy investments projects and provide relevant training/seminars (operation & maintenance of various renewable energy/energy efficient installations) are available; Output 5.2. Capacity building training and seminar materials, evaluation forms, etc available;	Number of presentations developed:Amount of presentations and materials for capacity building of local decision makers and staff of beneficiary organizations Amount of staff trained	0	0	About 10municipal staff members trained; 1 training conducted	Number of published presentations and materials Capacity building reports; List of participants; Evaluation forms	
Output 5.4. Various events of awareness raising campaigns (Sustainable Energy Weeks/Days) organized and relevant materials (reports, photos, media coverage reports, etc.) are available;	Amount of conduced awareness rising events and amount of target participants	0	0	At least 3 awareness rising events At least 500 Telavi citizens (adults, schoolchildren &etc) reached	Relevant event photos, media coverage, event reports, etc; List of event participants	N/A
Output 5.5. Published communication materials including informational leaflets, brochures, posters etc.	Number of communication materials including informational leaflets, brochures, posters etc.	0	0	Published :300 leaflets; 300 brochures,	Event reports on the promotional materials disseminated	N/A

	Output 6.1: Official project events taken place and relevant documents are available (such as press-release, agendas, lists of participants, photos, videos, media coverage reports;	Number of conducted official project events	0	0	2	Event reports with relevant annexes (press-release, agendas, lists of participants, photos, videos, media coverage reports)	At least of kick off the meetings and project final events to be organized
	Output 6.2: Short documentary movie about implementation of the project;	Short video produced	0	0	1	Copy of the movies on the disc	At least 10 minutes length video will be described building energy performance conditions before and after piloting RE & EE technologies and social and environmental benefits
	Output 6.3: Information disseminated through web-pages and facebook pages (links) and other information channels;	Amount of the posts in social media and amount of appearance in mainstream media	0	0	At least 20 posts and articles in social and mainstream media	Communication reports	For the social media EECG and municipality as well as CoM East facebook and web-pages will be used. Press-releases on the project will be distributed among mainstream media
	Output 6.4: Presentations and photos of the events reflecting the participation of project team (coordinator, manager) in different national and international events and promoting the results of this Action.	Number of presentations in the different national and international events promoting project activities.	0	0	3	Event reports with photos, event agenda &etc reflecting the participation of project team (coordinator, manager) in different national and international events	
ACTIVITIES	A1.1. Coordination of the Action	*Means:* *- Human resources (Technical & Administrative): 5 (five) Technical Experts: Key Expert in Energy Efficiency - Team Leader; Key Expert in procurement ; Key expert in Communication & Awareness Rising; Pool of Non Key Technical Expert; Non Key communication Expert ; 2 (two) Administrative staff:*					1. Due to the upcoming local self-governmental electionspossible staff changes in their upper and middle management.
	A1.2. Day to Day management of Action						

	A1.3. Monitoring & evaluation of overall progress of Action A1.4. Staffing, detailed job description, contracts with staff, work plan A1.5. Site visits and meetings with co-applicants and establishment of Steering/Management Committee. A1.6. Interim Progress Report & Financial Report with all relevant supporting documents; A1.6. Final Progress & Financial Report with all relevant supporting documents. A2.1. Identification of target municipal/public building stock A2.2. Development of selection criteria for two pilot public/municipal buildings: A2.3. Carrying-out the selection of the two pilot municipal/public buildings; 2.4Conducting energy audits in order to identify relevant and suitable renewable energy and energy efficiency measures for each pilot municipal/public buildings;	*Project Coordinator & Administrative Assistant . The responsibilities & tasks of all experts & administrative staffs are detailed presented in the grant proposal.* *- Equipments for pilot projects: Complete set of RE&EE measures for 2 (two) pilot buildings; Equipment (1 unit) for vineyards' pruning shredding (complete set for biomass source);* *Training sessions: 2 trainings for the staff of the beneficiary organizations; number of steering/management committees meetings; number field visits.* *-Visibility Actions: numbers of awareness rising events (sustainable energy days/weeks in each year during 3 years); number of the conferences (at least 3) participating at the national/international conferences; 2 commissioning events* *Project cost 748,641.60 Euro* *Costs* *(Breakdown in the Budget for the Action. For more details please see Annex III to the Contract)* *1. Human Resources* *1.1 Salaries: Technical experts, Administrative/ support staff* *1.3 Per diems for missions/travel: Local (staff assigned to the Action), commissioning event participants* *2. Travel: Local transportation* *3. Equipment and supplies: Purchase of equipments needed for the pilot sites & for shredding of agricultural waste* *4. Local office: Vehicle costs, Office rent, Consumables - office supplies, other services (tel/fax, electricity/heating, maintenance)* *5. Other costs, services: Publications; Studies, research (technical design of the buildings reconstruction and warehouse); auditing costs; translation, interpreters; financial services (bank guarantee costs etc.); Costs of trainings/seminars; Visibility actions*	**Mitigation:** ECCG team will establish and maintain good inter-personal contacts, cooperate actively with new executive branch of local self-governments, and will establish along with local executive officials sustainable local energy policy based on CoM commitments less dependent on political changes; 2. The announced local self-governmental reform which implies the cancellation of self-government status and unification of some municipalities (self-governing Telavi city & self-governing Telavi municipality). **Mitigation**: the announced reforms will not cause in-depth changes in terms of local governance; consequently, mentioned reforms will not prevent successful implementation of the Action. 3. The potential for successful implementation of the CoM initiative through development and implementation of SEAPs is based on the independence of local authorities to act. This is not the situation in Georgia. Energy issues are primarily viewed from the centralized supply side, while innovative solutions come from the decentralized demand side. **Mitigation:** Existing contacts (EECG as CoM Supporter to Georgia has good contacts with Ministry of Energy as well as Ministry of Environment as National Coordinators to Georgia) established with national administrations with objective to facilitate the CoM implementation. Moreover, the state

	A3.1.Based on energy audits to develop relevant architectural-engineering drawings/designs needed for complete thermo-modernization of the two pilot buildings (walls, roof/attic, basement/floor, windows & doors,*etc*; A3.2.Developing relevant technical designs for implementation of modernized renewable energy heating systems using agricultural waste (vineyard pruning residues) and with consideration of solar energy for domestic hot water heating system		administrations (Ministry of Energy of Georgia and/or Ministry of the Environment of Georgia) fully support the implementation of energy efficiency policy in Georgia; which is confirmed by the recently developed National Energy Efficiency Action Plan (NEEAP), which will be approved in the nearest future by the Government of Georgia. Also the document "Intended Nationally Determined Contributions (INDCs)" as strategy of environmental policy RE & EE measures are important instrument/tools for promoting of GHG emission reduction. 4. Interruption and/or delay of the co-financing of sustainable energy investment projects due to the political unrest (upcoming Local Government Elections in October 2017) from side of target municipalities. **Mitigation:** The solution is that in local budget for 2018 allocation of funds for co-financing have been foreseen; In addition, currently, the Building Energy Efficiency Law is in the process of the development where is envisaged the energy performance improvements during the capital repairs of the public/municipal buildings. 5. EU tender procurement procedures requested for EU-funded projects; more specific, RE &EE applications/technologies for sustainable energy investment projects have to be purchased as well as implemented in accordance with EU tender procedures which means that all mentioned applications have to be produced in EU countries

			and/or licensed in non EU countries. **Mitigation:** EECG already has experience to realize sustainable energy demonstration/investment projects in accordance with EU procedures and standards; the example of this is the implemented project:"Covenant of Mayors Capacity Building Model for Ukraine and Georgia: Model Solution for Eastern Partnership and Central Asian Countries' funded by EU Commission in 2012-15 years (http://eecgeo.org/en/project_como.htm); 6. Subsidizing gas tariffs that could cause the reducing of economic attractiveness to use the agricultural waste as biomass energy. **Mitigation:** Currently, the National Renewable Energy Action Plan/NREAP is under the process of development where is included the encouraging incentives for using of renewable energy sources in Georgia; 7. After local self-governmental elections (after 21 October, 2017), the newly elected local government might change priorities in terms of co-financing; **Mitigation:** Currently, the Building Energy Efficiency Law is in the process of the development where is envisaged the energy performance improvements during the capital repairs of the public/municipal buildings.
	A3.3Development of relevant technical designs for new ventilation systems, which shall improve energy efficiency		

	and indoor environment of the selected pilot buildings;		
	A3.4 Preparation of all necessary tender documentations for architectural-engineering, technical design, other services and subsequent supply and works contracts in relation to thermos-modernization of the two selected pilot buildings;		
	A3.5. Tendering and signature of the services, works and supply contracts with the selected companies and providers in relation to thermo-modernization of the two selected pilot buildings.		
	A7.1.Performance, monitoring and supervision of thermos-modernization (supply and works contracts) of 2 pilot buildings;		

	A7.2.Development of operation & maintenance guidelines;	
	A7.3. Testing and proper handover of modernized 2 pilot buildings and clean energy installations	
	A7.4.Providing training for beneficiary organizations on operation and maintenance of clean energy applications	
	A4.1.Based on biomass energy potential identified in SE(C)AP's and needs assessed during the En.Audit development prepare necessary procurement documentation for development of tech. specification for warehouse building, technical parameters for the tools and machinery needed for biomass supply chain as well as engineering drawings/designs needed for proper operation of the biomass warehouse.	
	A4.2. Developing relevant technical designs for tech. specification of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the	

	biomass warehouse and machinery needed for biomass supply chain		
	A4.3.; Identify the building to be used for warehouse from the relevant municipal building stock;		
	A4.5 procurement documentation for supply and works for equipping of warehouse building, technical parameters for the tools and machinery as well as engineering drawings/designs needed for proper operation of the biomass chain		
	A 4.6 Establishment biomass network and/or association with locally administration and local private sector in order to ensure long-term sustainability of biomass supply chain;		

	A5.1. Development of materials for capacity building training of local decision makers and staff of beneficiary organizations,		
	A5.2.Delivery of capacity building training and seminars;		
	A5.3.Conducting awareness raising campaigns (Sustainable Energy Weeks/Days);		
	A5.4. Development of communication materials for both local decision makers (to replicate the project in other sites), and public at large		
	A6.1. Organization of official project commissioning events		
	A6.2. Dissemination of information on project activities via various social networks;		
	A6.3. Participation in annual national and/or international conferences (at least 3) to present project progress and project outcomes		
	A6.4. Promote the project activities and results during CoM related events in Georgia and other ENPI countries		

1. Budget for the Action[1]

Costs	All Years		Year 1[2]	
	Unit [13]	Total Cost (in EUR)[3]	Unit	Total Cost (in EUR)
1. Human Resources[14]				
1.1 Salaries (gross salaries including social security charges and other related costs, local staff)[4]		131 400,00		**55 100,00**
1.2 Salaries (gross salaries including social security charges and other related costs, expat/int. staff)	Per month	0,00	Per month	**0,00**
1.3 Per diems for missions/travel[5]	Per month	9 000,00		**3 000,00**
Subtotal Human Resources		***140 400,00***		***58 100,00***
2. Travel[6]				
2.2. Local transportation (Tbilisi-Telavi-Tbilisi) 1.5 travel per month as average	Per month	21 600,00	Per month	**7 200,00**
Subtotal Travel		***21 600,00***		***7 200,00***
3. Equipment and supplies[7]				
3.1 Purchase or rent of vehicles	Per vehicle		Per vehicle	
3.2 Furniture, computer equipment…				
3.3 Machines, tools…				
3.3.1.Thermo-modernisation of pilot building 1	*Complete set of (RE&EE)*	*150 000,00*	*Complete set of (RE&EE)*	***112 500,00***
3.3.1.1. Thermal insulation materials & installation costs for building envelope (walls, roof/attic, basement/floor, windows & doors, etc.)		*90 000,00*		***67 500,00***
3.3.1.2 Installation of modernized clean energy heating systems with using of agricultural waste (vineyards' pruning residues) with consideration of solar energy for domestic hot water heating system		*50 000,00*		***37 500,00***
3.3.1.3. Installation of modernized EE ventilation systems for improvement of indoor environment in selected public buildings/sites		*10 000,00*		***7 500,00***
3.3.2. Thermo-modernization of pilot building 2	*Complete set of (RE&EE)*	*150 000,00*	*Complete set of (RE&EE)*	***112 500,00***
3.3.2.1. Thermal insulation materials & installation costs for building envelope (walls, roof/attic, basement/floor, windows & doors, etc.)		*90 000,00*		***67 500,00***
3.3.2.2 Installation of modernized clean energy heating systems with using of agricultural waste (vineyards' pruning residues) with consideration of solar energy for domestic hot water heating system		*50 000,00*		***37 500,00***
3.3.2.3. Installation of modernized EE ventilation systems for improvement of indoor environment in selected public buildings/sites		*10 000,00*		***7 500,00***

1. Budget for the Action[1]

Costs	All Years Unit [13]	Total Cost (in EUR)[3]	Year 1[2] Unit	Total Cost (in EUR)
3.3.3. Vineyards' Pruning shredding, transportation and storing equipment	*Complete set of (Biomass Resource)*	*118 000,00*	*Complete set of (Biomass Resource)*	***0,00***
3.3.3.1 A set of tractor and machinery/tools for collecting of agricultural biomass residues from the field and preliminary	*per set*	*60 000,00*		***0,00***
3.3.3.2 Vehicle for transportation of agriculture waste from fields to storing place and from stroing place to clients	*per set*	*10 000,00*		***0,00***
3.3.3.3 Equipment for the warehouse (1 shreder, 2 conveyers, 1 loader, 1 packaging machine and other minor machinery/equipment needed for operation of warehouse)	*per set*	*30 000,00*		***0,00***
3.3.3.4 Utility, fuel and other costs needed for proper operation of biomass supply chain during the project timeline	*per set*	*18 000,00*		***0,00***
Subtotal Equipment and supplies		***418 000,00***		***225 000,00***
4. Local office[14]				
4.1 Vehicle costs	Per month	5 400,00	Per month	**1 800,00**
4.2 Consumables - office supplies	Per Month	1 800,00	Per month	**1 200,00**
4.3 Office fee	Approportionment	3 600,00	Per month	**600,00**
4.4 Other services (communication/utilities and other office O&M related costs)	Approportionment	4 500,00	Per month	**1 500,00**
4,5 Accountancy (Outsourced to BDO)	Approportionment	11 700,00	Per month	**3 900,00**
Subtotal Local office		***27 000,00***		***9 000,00***
5. Other costs, services[8]				
5.1 Publications[9]		1 130,00		360,00
Brochures	*Per unit*	*750,00*		*250,00*
Leaflets	*Per unit*	*300,00*		*100,00*
Display Posters	*Per unit*	*30,00*		*10,00*
Handouts	*Per page*	*50,00*		*0,00*
5.2 Study, research (technical design of the selected buildings and	Per unit	30 000,00		25 000,00
5.3 Expenditure verification/Audit	Per unit	10 000,00		0,00
5.4 Evaluation costs	Per unit	3 000,00		3 000,00
5.5 Translation, interpreters	Per unit	2 000,00		2 000,00
5.6 Financial services (bank guarantee costs etc.)	Per unit	0,00		0,00
5.7 Costs of conferences/seminars[9]	Per unit	1 000,00		0,00
5.8. Visibility actions[10]		14 300,00		4 700,00
Pilot Building Launch Events -Technical Site Visits	*Per unit*	*3 000,00*		*0,00*
Organization of Sustainable Energy Days/Weeks	*Per Energy Day*	*6 000,00*		*2 000,00*
Information Stands	*Per Stand*	*100,00*		*0,00*
Action/Project Banner	*Per Banner*	*200,00*		*200,00*
Short video film describing Action activities	*Video Film*	*5 000,00*		*2 500,00*

1. Budget for the Action[1]

Costs	All Years Unit [13]	All Years Total Cost (in EUR)[3]	Year 1[2] Unit	Year 1[2] Total Cost (in EUR)
Subtotal Other costs, services		**61 430,00**		**35 060,00**
6. Other				
Subtotal Other				
7. Subtotal direct eligible costs of the Action (1-6)		**668 430,00**		**334 360,00**
8. Indirect costs (maximum 7% of 7, subtotal of direct eligible costs of the Action)		46 790,10		23 405,20
9. Total eligible costs of the Action, excluding reserve (7+ 8)		**715 220,10**		**357 765,20**
10. Provision for contingency reserve (maximum 5% of 7, subtotal of direct eligible costs of the Action)		33 421,50		16 718,00
11. Total eligible costs (9+10)		***748 641,60***		***374 483,20***
12. - Taxes [11] - Contributions in kind [12]				
13. Total accepted[11] costs of the Action (11+12)		***748 641,60***		***374 483,20***