WASTE MANAGEMENT TECHNOLOGIES IN REGIONS, GEORGIA

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Prepared for:
Mission Environmental Officer
Economic Growth Office
USAID | Caucasus

Prepared by:
International City/County Management Association
777 North Capitol Street NE, Suite 500
Washington, DC 20002-4201

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ABBREVIATIONS

ADC	Austrian Development Cooperation
APA	Agency of Protected Areas
CENN	Caucasus Environmental NGO Network
DCOP	Deputy Chief of Party
EHS	environmental health and safety
EIA	environmental impact assessment
EIEC	Environmental Information and Education Centre
EU	European Union
FB	Facebook
GHG	greenhouse gas
GoG	Government of Georgia
ICMA	International City/County Management Association
ISC	Institute for Sustainable Communities
ISWM	integrated solid waste management
MOENRP	Ministry of Environment and Natural Resources Protection
NGO	non-governmental organization
PSA	public service announcement
PMP	performance monitoring plan
4Rs	reduce, reuse, recover, recycle
SWM	solid waste management
SFG	Sustainable Forest Governance in Georgia program
SWMCG	Solid Waste Management Company of Georgia
USAID	United States Agency for International Development
WMTR	Waste Management Technologies in Regions
WMA	Waste Management Association

Program Background

The USAID Waste Management Technologies in Regions Program (WMTR) was awarded to International City/County Management Association (ICMA) on March 18, 2014, under Cooperative Agreement AID 114-LA-14-00001. ICMA is implementing WMTR in partnership with a local sub-recipient, the Caucasus Environmental NGO Network (CENN). WMTR is designed to contribute to the following USAID monitoring and evaluation framework objectives and results:

- Strategy Development Objective 2: Inclusive and sustainable growth.
- Intermediate Result 2.3 More responsible management and development of Georgia's natural endowments.
- Intermediate Result 2.3.3 Waste management improved.

The goal of WMTR is to provide professional waste management technical assistance to support waste management system development and recycling in two regions of Georgia — Kakheti and the Autonomous Republic of Adjara. Project activities will promote greenhouse gas (GHG) mitigation and sequestration by developing the waste management sector, including waste collection, recycling, and public awareness. Specifically, this project will enable GHG mitigation and sequestration from the waste sector by enabling the recycling business environment in targeted regions and municipalities; improving waste collection systems; minimizing pollution of natural resources from landfills by closing down old, illegal landfills and dumpsites; and enhancing public awareness of waste management issues and ensuring public participation in the decision-making and designing process of new waste management systems. Additionally, ICMA will work closely with its local partner, CENN, to build the capacity of its staff with the ultimate goal of WMTR handover in 2017.

WMTR activities combine various components into a comprehensive structure that focuses on technical assistance and capacity/institution building of integrated waste management systems and recycling/composting in two regions of Georgia — Kakheti and Adjara AR. WMTR has four main components:

- Component 1: Waste Collection and Recycling Systems
- Component 2: Private Sector-Led Recycling
- Component 3: Waste Management Strategy and Tariff Policy
- Component 4: Communication and Outreach

WMTR also implements cross-cutting activities that support the four components above and promote local governance. The cross-cutting activities include, among others, empowerment of youth and women, ethnic minorities and people with disabilities, and gender mainstreaming.

This Quarterly Report covers the period from January 1 until March 31, 2016, within the USAID Fiscal Year 2016.

Assumptions, Problems and Barriers

WMTR had to contend with the following assumptions, problems and barriers during the reporting period:

- Miscommunication and lack of coordination among donor agencies working in the waste management sector;
- Lack of communication among state institutions responsible for waste management in Georgia;
- Lack of financial resources in the municipal budgets allocated for waste management;
- Lack of technique and equipment (trucks, bins, etc.) in the municipalities required for waste collection;
- Lack of accurate data on GHG emissions from the waste management sector to create a baseline and develop short-term and long term goals for the reduction of emissions;
- Lack of local expertise in waste management;
- The very limited number of recycling companies with both the capacity and willingness to be potential grant recipients is a significant barrier;
- Socio-economic situation in the country;
- Lack of awareness by general public of integrated waste management issues: waste separation, recycling, tariff issues, etc.

To mitigate the potential problems and barriers, WMTR works closely with all tiers of government and other stakeholders on capacity building and has been using an intensive communication, outreach and awareness campaign to promote best practices in waste management and recycling systems.

Significant Events and Achievements during the Reporting Period

- On March 10, 2016, the WMTR team transferred the TDL-500 Portable Gas Analyzer to the Solid Waste Management Company of Georgia (SWMCG). For the first time in Georgia, the Portable Gas Analyzer will enable the SWMCG to measure greenhouse gas (GHG) emissions from landfills, assess the negative impacts of landfills on the environment, and plan activities that will reduce GHG emissions from landfills;
- In January 2015, the WMTR team conducted the winter composition study in order to analyze the morphological composition of municipal waste in the program target regions. The work was coordinated with the SWMCG and local governments. The study will be conducted four times a year in both target regions to cover every season;
- On April 1, 2016, the Prime Minister of Georgia, Giorgi Kvirikashvili, approved the *Rules of Collection and Treatment of Municipal Waste,* a technical regulation developed by the WMTR team in cooperation with the MoENRP;
- In March 2016 the WMTR team developed a cost-benefit analysis report of waste management investments in the country to ensure the effectiveness of establishing a proper waste management system in Georgia;
- The WMTR team continues the *Piloting of Integrated Waste Management Systems in Target Areas of Telavi Municipality* program. The project is being implemented in 5 villages of Telavi Municipality — Tsinandali, Kvemo Khodasheni, Akura, Vanta and Busheti — and aims to introduce separated

waste collection and a recycling system to make this process replicable in other Georgian regions and municipalities;

- On February 26, 2016, the Deputy Minister of Environment and Natural Resources, Teimuraz Murghulia, visited 5 pilot villages of Telavi Municipality to meet the local government and community in order to discuss the progress of the pilot project and existing challenges;
- On March 24–25, 2016, the WMTR team conducted a two-day practical training for the staff of SWMCG on the usage of GHG measurement equipment;
- On January 5–7, 2016, the WMTR team, in cooperation with the local government of Telavi Municipality, cleaned a dumpsite covering 1 ha of land in Akura Village in Telavi Municipality, Kakheti region. About 50 m^3 of waste was removed from this dumpsite and transported to the Telavi landfill;
- In March, 2016 the WMTR team, in cooperation with the Agency of Protected Areas (APA) of MoENRP developed a draft *Protected Area Waste Management Guideline*;
- The WMTR team supported Neoprint Ltd in developing an Environmental Impact Assessment (EIA) report to receive an environmental permit. In January 2016, based on the EIA report, the MoENRP made a positive decision that allows the company to continue operation;
- In February 2016, the WMTR team conducted an Energy and Environmental Health and Safety (EHS) audit for Zugo Ltd, a plastic bag recycling company located in Batumi, Adjara AR. A report has been developed based on the assessment's results;
- In March 2016, the WMTR team developed a legal analysis report on identification of deficiencies and corresponding legal amendments in the waste management sector to support the development of recycling businesses;
- On January 6, 2016, the WMTR team announced a grant competition for plastic (including PET bottles), paper, and glass recycling companies. On March 30, 2016, the evaluation committee identified five winning companies. Before finalizing a decision on the grantee and starting development of grant applications, pre-award assessment reports will be prepared;
- In March, 2016, the WMTR team developed a general methodology for establishing a waste management tariff and a cost recovery system in Georgia. In April 2016, the document was passed to various stakeholders for revision, to ensure that the opinions and visions of all parties are considered. After receiving their feedback and incorporating comments, the report will be officially submitted to the relevant governmental structures for consideration. The WMTR team will also organize active consultations with the public based on the report;
- On January 21, 2016, the WMTR team organized a meeting with the Telavi Municipality trustees and the Waste and Chemicals Management Service of the Ministry of Environment and Natural Resources Protection of Georgia. WMTR facilitated the discussion between the representatives of local and national governments on the roles and responsibilities of local government in introducing effective waste management systems, including waste separation and recycling;
- On February 6–8, 2016, the WMTR team organized a three day training for school teachers from 5 target villages of Telavi Municipality (Kakheti Region) on non-formal education. WMTR provided the teachers with information and techniques on how to work with students in a non-formal environment to increase their motivation, develop the capacity, and stimulate the environmentally friendly attitude required to support the introduction of integrated waste management practices;
- On February 24, 2016, the WMTR team, together with four high school students and Eco-Club members of Telavi public schools #1 and #4 visited public schools in the Telavi Pilot Project villages — Tsinandali, Kvemo Khodasheni, Vanta, and Akura. The meetings were intended to increase knowledge of waste management issues among school students of the five pilot villages in Telavi Municipality and mobilize the community to support waste separation processes;

- On February 25–26, 2016, the WMTR team held a training on composting and development of waste separation systems at AISI College in Kachreti Village, Kakheti. On March 11, 2016, based on the information received at the training, AISI College students successfully constructed and installed a composting box;
- On March 2 and 4, the WMTR team held "Green Cafes" in public schools in the villages of Vanta and Kvemo Khodasheni in order to increase the school students' awareness about the importance of waste separation and recycling;
- On March 19, 2016, the WMTR team mobilized 25 students from the five target pilot villages of Telavi Municipality to take part in Earth Hour celebrations in Telavi. From 20:30-21:30 the lights on the main square, in municipal buildings, and on the street were out and during that one hour, people gathered at the main square of Telavi to celebrate Earth Hour by lighting candles and enjoying a concert by local bands and flash mobs staged by Eco Club students;
- In March 2016, the WMTR team created an educational e-game, *Sort and Recycle,* intended to raise awareness about waste separation and recycling in children aged six and above. The game provides examples of how useful items are produced from waste by sorting and recycling it, saving natural resources and the environment. The game is available on iOS, Android, and Windows;
- On March 22, 2016, the WMTR team held an interactive seminar for 15 second grade school students at the Environmental Information and Education Centre (EIEC). The EIEC team introduced them to the principles of sustainable waste management and the importance of recycling. At the end of the seminar, the WMTR team made a presentation and demonstrated the e-game — *Sort and Recycle*;
- In February 2016, the WMTR team developed a 4R brochure on household waste management. The brochure provides information on global and local challenges related to waste management, modern approached to solve these issues, and sustainable waste management principles;
- The WMTR team developed a sixth quarterly newsletter in English and Georgian, and distributed it through the CENN Electronic Network, which has more than 24,000 subscribers worldwide;
- The WMTR staff continues to update its Facebook page. Through this page the general public, including school students from the project target regions receive updates regarding the implementation of the program — competitions, trainings, workshops, grant announcements, information about ongoing activities, and news on modern practices in waste management;
- On March 17, 2016, the WMTR program, awarded two schools in Kakheti — Telavi #1 Public School and Zemo Alvani Public School — with grants. The aim of these grants is to popularize the concept of integrated waste management, and support introduction of relevant practices at local levels;
- The WMTR team continued to cooperate with various Georgian online news agencies to ensure the outreach of WMTR program activities and make them available for a broad audience. In the period of January–March 2016 eight articles were printed in online newspapers.

Status of Activities by Components

Component 1: Waste Collection and Recycling Systems

Conduct a preliminary environmental assessment and an assessment of current GHG emissions in Kakheti Region and Adjara AR

Measurement of GHG emissions via portable equipment and strengthening the capacity of the SWMCG to calculate landfill gas (GHG) emissions from existing landfills in Georgia

On March 10, 2016, USAID Mission Director, Mr. Douglas H. Ball, acting director of the Office of Economic Growth, Veronica Lee, AOR of the WMTR project, Nino Kumsishvili, and the WMTR team, visited Rustavi landfill to transfer the GHG portable equipment to the Solid Waste Management Company of Georgia.

For the first time in Georgia, the TDL-500 Portable Gas Analyzer will enable the SWMCG to measure greenhouse gas (GHG) emissions from landfills and asses the negative impacts of landfills on the environment. This equipment will also help the company to better plan their short-term and long-term objectives to reduce GHG emissions from existing landfills, and continuously monitor these emissions from existing and new landfills which will be built in accordance with EU requirements.

At the event, WMTR and SWMCG signed a memorandum of understanding pledging to cooperate to evaluate GHG emissions from landfills across Georgia, and develop mitigation measures to reduce their negative impacts on the environment. Parties agreed to exchange information on GHG emission measurement results and together plan further steps for the reduction of GHG emissions from landfills located in the WMTR project target regions – Kakheti Region and Adjara AR.

Following the signing of the MoU, the Mission Director personally participated in demonstrating a GHG measurement at the Rustavi landfill, along with SWMCG Director, Mr. Giorgi Shukhoshvili and the WMTR team.

Two weeks after the transfer ceremony, WMTR continued to build the capacity of SWMCG through theoretical and practical trainings on usage of the equipment, and processing collected GHG data. Information about the training is provided below.

Municipal waste composition study – winter season

The WMTR team is implementing a municipal waste composition study in Kakheti Region and the Autonomous Republic of Adjara in order to analyze the morphological composition of municipal waste in the program target regions. This information will help the government make informed decisions and better set short-term and long-term goals for establishing waste recovery and recycling systems. The study will be conducted four times a year in both target regions to cover every season. In 2015, the WMTR team already collected and analyzed data for two seasons — summer and autumn. Relevant information can be found in the previous WMTR reports.

During the winter study, which was conducted in the period of January 9–15, 2016, the composition of waste was evaluated at the two main landfills of the project target regions (Batumi and Telavi). The work was coordinated with the NSWMCG and local governments.

According to the winter season composition study, Batumi landfill contains large amounts of organic materials (41.18%), plastic (19.56%), paper (13.46%), textiles (5.95%) and diapers (5.89%). In addition, the landfill contains small amounts of glass, metal, pottery, leather and rubber.

The situation in Kakheti is slightly different, with large quantities of organic material (45.36%), diapers (12.93%), plastic (12.58%) and paper (10.94%), and with small amounts of glass, metal, pottery, leather, rubber, and building materials.

Please see below photos showing the process of the composition studies in each target region.

Kakheti Region

Autonomous Republic of Adjara

The tables below show the results of the summer, autumn, and winter composition studies, as well as the correlation between the data of these seasons. Final conclusions will be made after the composition study is conducted for all four seasons.

Kakheti Region

Waste Category	I (July)		II (October)		III (January)	
	2015		2015		2016	
	kg	%	kg	%	kg	%
Paper and cardboard	72.9	10.41	97.7	13.96	76.6	10,94
Glass	33.3	4.76	64.6	9.23	35.6	5.08
Scrap metal	13.95	1.99	14.3	2.04	20.7	2.95
Polyethylene/Plastic	89.3	12.76	108.1	15.44	88.1	12.58
Diapers	45.7	6.53	37.7	5.39	90,5	12.93
Fabric	35.2	5.03	51.6	7.37	25.7	3.67
Organic	304.1	43.44	274.9	39.27	317.5	45.36
Construction	44.75	6.39	7.8	1,11	13.3	1.9
Under special supervision	7.95	1.14	5.85	0.84	15.3	2.18
Leather/Rubber	28.9	4.13	23.7	3.39	3.5	0.5
Other waste	20	2.86	11.55	1.65	13.2	1.88
Moisture	3.95	0.56	2.2	0.31	0	0
Total	**700**		**700**		**700**	
Correlation	I-II	0.9681	I-III	0.9768	II-III	0.9767

Autonomous Republic Adjara

Waste Category	I (July)		II (October)		III (January)	
	2015		2015		2016	
	kg	%	kg	%	kg	%
Paper and cardboard	123.65	17.42	134.20	19.17	94.25	13.53

Glass	39.40	5.55	34.65	4.95	26.10	3.75
Scrap metal	7.70	1.08	10.65	1.52	12.20	1.75
Polyethylene/Plastic	119.10	16.77	112.95	16.14	136.95	19.66
Diapers	23.50	3.31	35.60	5.09	45	5.92
Fabric	23.40	3.30	58.05	8.29	41.65	5.98
Organic	285.10	40.15	240.60	34.37	288.25	41.39
Construction	18.95	2.67	38.25	5.46	26.40	3.79
Under special supervision	9.10	1.28	18.65	2.66	8.20	1.18
Leather/Rubber	16.50	2.32	8.70	1.24	10.20	1.46
Other waste	18.95	2.67	4.05	0.58	7.25	1.04
Moisture	24.65	3.47	3.65	0.52	3.45	0.49
Total	**710**		**700**		**696.51**	
Correlation	I-II	0,97258	I-III	0,98201	II-III	0,97244

Please see Annex 1. Winter Waste composition study reports.

Designing region-specific ISWM strategies and action plans

Development of technical regulations, Rules of Collection and Treatment of Municipal Waste, in accordance with the requirements of the Waste Management Code of Georgia

The WMTR team, in collaboration with the MoENRP, international and national experts, developed the technical regulations, *Rules of Collection and Treatment of Municipal Waste,* in accordance with the requirements of article 16, part 5 of the Georgian Waste Management Code. On April 1, 2016, the Prime Minister of Georgia, Giorgi Kvirikashvili, approved the technical regulation with Government of Georgia Resolution № 159.

This technical regulation was approved in accordance with the Product Safety and Free Movement Code, article 58, part 2; the Waste Management Code, article 49, part 2, subparagraph b; and the Georgian Law on Normative Acts, article 12.

Clause 2 of the approval indicates that the Minister of Environment and Natural Resources Protection of Georgia should approve the guideline on the development of the municipal waste management plans before December 1, 2016. It should be noted, that the WMTR team has already developed this guideline in cooperation with the MoENRP.

The technical regulation, *Rules of Collection and Treatment of Municipal Waste,* establishes the following procedures, measures, and criteria:

- Procedures and requirements for providing obligatory effective collection services to all municipal waste generators in a municipality, to minimize the impact on the environment of effects on local surface water, groundwater, soil, and air (including global environmental effects through mitigation of climate change related emissions) and on risks to human health;
- Measures aimed at minimizing litter throughout a municipality as well as eliminating possible nuisance conditions such as noise, odor, or other adverse effects;

- Measures aimed at reducing the overall impacts of resource use and improving the efficiency of such uses through recovery and recycling initiatives;
- Measures, procedures, and requirements for treating all municipal waste prior to landfill disposal in accordance with article 21, part 6 of the Waste Management Code;
- Minimum technical criteria that should be met by waste treatment facilities during provision of services.

This technical regulation shall apply to all collection and treatment processes associated with the management of municipal waste.

Please follow the link to see the regulation: https://matsne.gov.ge/ka/document/view/3242555

Development of Municipal Waste Management Plans for Municipalities in Kakheti Region and the Autonomous Republic of Adjara

According to article 13 (1) of the Law of Georgia, Waste Management Code[1], each municipality shall adopt a plan for the management of the municipal waste produced within its territory for a period of five years.

Therefore, WMTR in cooperation with the MoENRP, developed the Municipal Waste Management Plan Development Guideline (MWMPDG). This guideline will serve as a basis for the development of municipal waste management plans for all municipalities in Georgia.

In 2016, WMTR will support 7 municipalities in Kakheti and Adjara to develop municipal waste management plans by conducting workshops, roundtable meetings, and active involvement of the local and national governments. The local governments in these municipalities have appointed contacts for communication with the WMTR staff. The program has already started collecting relevant background information required to develop the plans.

Conduct pilot cost-benefit analysis of waste management investments

The WMTR team, developed a cost-benefit analysis report for waste management investments in the country to ensure the effectiveness of establishing a proper waste management system in Georgia.

This report includes an economic evaluation of alternative waste management options for the Autonomous Republic of Adjara and Kakheti Region in light of the evolving waste management system. The goal is to inform policymakers about the economic potential of alternative waste management strategies, to highlight issues about system integration and stakeholder impacts, and to suggest a strategy for mobilizing international support for financing recycling and composting alternatives that reduce methane and CO_2 emissions, providing global benefits.

The study considers a number of waste management options. It evaluates the costs and benefits of waste disposal at landfills, operating landfill-based material recovery facilities, composting systems, and source separation and recycling programs. The analysis is unique in its monetization of the economic value of reducing methane emissions through local composting programs.

[1] The law was enacted on January 15, 2015.

In particular, the report includes the following information:

Review of Waste Management in Adjara AR and Kakheti Region

Economic Evaluation of Solid Waste Collection, Removal, and Landfilling

The Costs of Landfilling Municipal Solid Waste

The Social Cost of Methane Emissions

The Cost of Waste Collection and Removal

The Total Cost of Solid Waste Disposal

Economic Evaluation of Source Separation and Recycling

Source Separation at Materials Recovery Facilities

The Social Value of Reducing CO2 Emissions through Recycling

Decentralized Source Separation and Recycling

Organic Waste Diversion and Composting

Policy Issues

Economic Evaluation Issues

Stakeholder Effects

Conclusions and Recommendations

Once the document is translated into Georgian, it will be communicated with stakeholders.

Please see Annex 2. Cost-Benefit Analysis report of Waste Management Strategies for the Adjara Autonomous Republic and Kakheti Region of Georgia.

Implement pilots via partial grant to assist recycling companies and target municipalities

Implementation of Telavi pilot project to demonstrate benefits of integrated waste management approaches in target villages of Telavi Municipality

In 2015, the WMTR team started a pilot project — *Piloting of Integrated Waste Management Systems in Target Areas of Telavi Municipality.* The project is being implemented in 5 villages of Telavi Municipality — Tsinandali, Kvemo Khodasheni, Akura, Vanta and Busheti. The aim of the pilot project is to demonstrate the benefits of integrated solid waste management (ISWM) practices via the provision of technical assistance, co-financing support, and the establishment of an ISWM system, as well as to raise awareness in local governmental structures and the wider public.

In December, 2015, the WMTR team placed 75 waste bins in the pilot villages, including 30 bins for separated collection of plastic and paper waste. The bins were placed in the center of the villages, at shops and near public schools. The waste is collected separately (plastic and paper waste) and then stored in a warehouse allocated by the local government. The recycling company is in charge of taking separately collected plastic and paper from the storage and then recycling it.

Over the reporting period, the WMTR team and the local government monitored the process of separated waste collection. WMTR also communicated with the local government, public, and school students from the 5 pilot villages on a daily basis to foster introduction of waste separation behavior. A number of trainings and awareness raising campaigns have already been conducted in these villages, which are reported in this document under component 4.

Visit of Deputy Minister of Environment and Natural Resources Protection, Teimuraz Murgulia to the Pilot villages

On February 26, 2016, Teimuraz Murghulia, Deputy Minister of Environment and Natural Resources Protection of Georgia visited the 5 pilot villages of Telavi Municipality to meet the local government — the Gamgebeli and Deputy Gamgebeli — as well as trustees and the local population of the villages.

During the meetings the deputy minister discussed the progress of the pilot project and existing challenges with all stakeholders. He mentioned the importance of active public participation in this process and ensured government support in the implementation of this project. Mr. Murghulia mentioned that this is the first case in Georgia where waste separation has been formally introduced. Therefore, the success of the project is very important in order for the country to make this process replicable.

Provide tailored assistance and training to municipalities and SW companies

Capacity building training of the SWMCG staff on the usage of the Portable Gas Analyzer TDL-500

On March 24-25, 2016, the WMTR team conducted a two-day practical training for the staff of the Solid Waste Management Company of Georgia on the usage of GHG equipment.

The first day the training was held in the office of the SWMCG. The staff of the company received information about the functioning, usage and maintenance of the equipment and software and collection and storage of the data.

On the second day, the WMTR team, together with the staff of the SWMCG, visited Kaspi landfill to take measurements using the new equipment.

In April and May, the staff of the SWMCG will conduct measurements at landfills in the project target regions. Once the baseline data is collected and the GHG potential at these landfill is evaluated, the WMTR team and the staff of the SWMCG will develop a plan aimed at mitigating the emissions.

Develop landfill remediation/closure plans.

Cleaning of illegal dumpsite in Akura Village of Telavi municipality, Kakheti region

On January 5–7, 2016, the WMTR team, in cooperation with the local government of Telavi Municipality, cleaned a dumpsite covering 1 ha of land in Akura Village. About 50 m^3 of waste was removed from this dumpsite and transported to the Telavi landfill. One year ago the land served as a dumpsite for about 350 households in the village. However, after the local government installed bins in this village last year, the population has stopped disposing of waste at this area.

Landfill remediation/closure plans - Environmental Assessment

In April and May, 2016 the WMTR team will conduct an Environmental Assessment for the closure and remediation plans of the following landfills and dumpsites located in Kakheti Region and Adjara AR:

- Gurjaani Landfill, Gurjaani Municipality, Kakheti Region:
    - The Gurjaani landfill is located along the Gurjaani-Jabukiani-Lagodekhi road. According to official information, the Municipality of Gurjaani utilized the site for municipal waste disposal from 2010 to February of 2014. In 2014 operation of the site ceased and solid waste that had been previously delivered to the Gurjaani landfill is now delivered to the landfill at Tsnori. There is little information available concerning the total quantity of solid waste delivered to the site during the time that it was utilized. Anecdotal information from municipality employees interviewed as a part of the site assessment process indicated that waste delivered to the site was regularly burned. About 14944.2 m^3 of technogenic earth (waste) was disposed on the area.
- Beshumi illegal dumpsite, Khulo Municipality, Adjara AR:

- The dumpsite has been in operation since 2002 and covers an area of 780 m^2; it is not fenced off and is surrounded by a unique forest. According to information provided by the local government, there is 6,000 m^3 of waste at the Beshumi dumpsite.

- Telavi Landfill, located in Telavi Municipality of Kakheti Region:
  - Telavi landfill is located 1 km south-west of Gulgula Village in Telavi municipality. The landfill has a rectangular configuration with an area of 5.6 hectares it was transferred to the Solid Waste Management Company in 2013, after which it has been fully regulated, with fences installed around the edges and a guard posted. Based on data from 2015-2016, about 1,410,890 tons of waste was disposed of at the landfill.

The WMTR team will develop an Environmental Assessment (EA) for the closure and remediation of the above landfills. The Scoping Statement (SS) and EA should be approved by the Bureau Environment Office (BEO).

Protected area waste management guideline

In March 2016, the WMTR team, in close cooperation with MoENRP's Agency of Protected Areas (APA), developed a draft *Protected Area Waste Management Guideline*.

Development of such a guideline is a requirement of the *Waste Management Strategy and Action Plan* that was approved by the government on April 1, 2016.

Georgia's protected territories consist of 585,883 hectares of land, which is approximately 8.41% of the country's entire area. The high social and environmental value of these protected areas establish a firm basis for restrictions and conditions for public use aimed at assuring visitor activities do not decrease the value of Protected Areas as an important national resource. The APA is responsible for the management of Georgia's protected areas. Within their responsibilities, the APA must address a number of issues that have the potential to cause environmental damage. This includes the possible impact of improper waste management.

Any waste derived from the use and administration of Georgia's protected areas must be managed in an effective manner to assure that the high environmental and aesthetic value of the protected areas is not jeopardized. This guideline is intended to define sound practices and standards that will help assure that waste originating from use of the protected areas is managed properly.

The draft guideline includes the following information:

1. Basis for the protected area waste management guideline

    1.1 Protected Areas that are the Subject of the Guideline

    1.2 Visitor Waste Generation Characteristics

    1.3 Existing Baseline Practices and Problems

    1.4 Conflicts with or Impact of Adjoining or Nearby Land Uses

2. Evaluating protected are waste management alternatives

    2.1 Zero Waste Principle – Carry in-Carry out

    2.2 Source Reduction

    2.3 Recycling

2.4 Composting

2.5 Collection

2.5 Coordinating with Municipal Waste Collection and Disposal Programs

3. Making waste management design and operational decisions for individual protected areas

3.1 Who and Where: Waste Generator Analysis

3.2 What: Waste Composition Analysis

3.3 How: Making Waste Management System Design and Operational Decisions

3.4 Monitoring and Enforcement

4. Implementing effective public communication, education and outreach

4.1 Designing and Deploying Protected Area Signage

4.2 Utilizing Printed and Other (Television, etc.) Media Educational and Outreach Materials

4.3 Developing and Implementing Waste Management Related Educational Programs

4.4 Developing and Supporting Special Events including Periodic Clean-up Initiatives

5. Implementing effective waste management programs at all protected areas

The guideline will be finalized in May 2016, once all comments provided by the APA are incorporated.

Component 2: Private Sector-led Recycling

Provide tailored assistance and training to recycling companies

Supporting Neoprint Ltd in developing an Environmental Impact Assessment (EIA) report to receive an environmental permit

The WMTR team helped Neoprint Ltd develop the required Environmental Impact Assessment (EIA) report and submit it to the Permit Department of the MoENRP for approval. According to the *Georgian Law on Permit for Impact on the Environment,* operation of Neoprint is subject to mandatory EIA. Consequently, the company requires a permit from the MoENRP based on an environmental impact assessment. The EIA report developed for Neoprint considers possible impacts on, and risks to different components of the physical, biological, and human environment.

In January 2016, based on the EIA report, the MoENRP made a positive decision that will allow the company to continue operation. The decision however, stipulates certain additional requirements and a timeframe for their implementation. It is mandatory for Neoprint to implement those requirements to mitigate environmental and social risks.

Energy and Environmental Health and Safety (EHS) audit for Zugo Ltd

In February, 2016 the WMTR team conducted an Energy and Environmental Health and Safety (EHS) audit for Zugo Ltd, a plastic bag recycling company located in Batumi, Adjara AR. A report has been developed based on the assessment's results.

The audit report analyzed the conditions of the building and the technological line of the company. The report provides two options for the company to save the energy. These options require different investments and differ by the potential energy savings.

The energy audit showed that heat insulation of the building is necessary. The table below provides energy information and the resulting monetary savings for options 1 and 2.

Energy audit			
Zugo Ltd		**Area: 350 m^2**	
EE activities	**investment [GEL]**	**Saving**	
		[kvt hour/year]	**[GEL/year]**
Option I	74,621	105,094	20,850
Option II	102,874	163,330	32,522

The report also provided a list of recommendations to the company on how to mitigate environmental and health risks by implementing certain activities.

Please see Annex 3. Energy and Environmental Health and Safety (EHS) audit for Zugo LDT.

Legal analysis report to identify deficiencies in the waste management sector

In March 2016, the WMTR team developed a legal analysis report to identify deficiencies and corresponding potential legal amendments in the waste management sector to support the development of recycling businesses.

The report provides information on the following issues:

- Waste ownership and legal aspects for selling waste
- Waste as a product
    - Municipal waste ownership issues
    - Separated collection of waste and storage
    - Privatization of municipal waste
    - Waste as a municipal property
    - Conditional auction
- How to include a waste in the asset list
- Waste transportation
- Contractual issues

The report provides very concrete information to entrepreneurs on how to deal with these issues. In May 2016, the WMTR team will conduct a workshop for the Waste Management Association based on the findings of the report to discuss ways to solve the issues identified.

Issuing grants to support GHG mitigation, energy efficient technologies, and source separation programs

Grant competition on municipal waste (plastic, paper, glass) recycling

On January 6, 2016, the WMTR team announced a grant competition for plastic (including PET bottles), paper, and glass recycling companies.

The aim of the competition is to support recycling companies to:

- Increase company productivity and energy efficiency;
- Manufacture products meeting international standards.

The WMTR team expects to have the following outcomes:

- Increase of the amount of recycled waste;
- Recycle waste in an energy-efficient company;
- Produce high quality, competitive products.

The contest closed on February 19, 2016. The WMTR received 7 applications.

The evaluation committee evaluated all applications independently in accordance with the following criteria:

1. **Strategic Fit** (maximum 45 points);
2. **Organizational Capabilities** (maximum 30 points);
3. **Cost Realism and Allowability** (maximum 25 points).

The maximum possible score was 100 points.

On March 30, 2016, the evaluation committee identified 5 winning companies with the following area of operation:

I /E Giorgi Aphridonide	- Production of polymeric material
Zugo Ltd	- Production of new and recycled polyethylene Bags
Sanitari Ltd	- Management of hazardous and non-hazardous waste
Neoprint Ltd	- Paper Production
Sever Ltd	- Treatment and sale of plastic bottles and paper waste

However, before making the final decision and starting development of grant applications, pre-award assessment reports will be prepared based on pre-award assessment questionnaires submitted by each applicant and a physical evaluation of companies' documentation and premises.

A final decision will be made based on the result of this pre-award assessment.

Component 3: Waste Management Strategy and Tariff Policy

Development of general methodology for tariff calculation and a cost recovery system

In March 2016, the WMTR team developed a general methodology for establishing a waste management tariff and a cost recovery system in Georgia. The development of such a methodology is a requirement of the Waste Management Strategy and Action Plan, approved by Prime Minister of Georgia Giorgi Kvirikashvili on April 1, 2016.

The relevant report has been developed along with an Excel-based waste tariff calculation tool. The report provides general methodology for determining waste tariffs in accordance with modern requirements and proposes a cost recovery system that will ensure the sustainability of solid waste management systems at the municipal level.

According to the report, modern tariff-setting principles provide criteria for determining the tariff. These principles, when applied, affect the efficiency, equity, and sustainability of the waste management system. Each of these principles should be considered in the tariff setting process. At present, Georgian law requires the application of some, but not all of these principals.

Therefore, the report proposes the following principles that are consistent with international best practices, and should be considered in governing and shaping the determination of tariffs for solid waste services: legal requirements; cost recovery; financial viability; horizontal equity; vertical equity and poverty alleviation; administrative and technical feasibility; polluter pays; and transparency.

The document also provides basic information including: internationally accepted modern tariff setting principals; descriptions of modern waste management services; revenue and cost accounting standards for waste management; and current legal and regulatory requirements applying to establishing tariffs.

The document provides concrete recommendations on the changes required in current laws related to waste tariffs that should be made to make this sector self-sufficient through the recovery of maximum costs associated with the services provided.

In particular, the report includes the following information:

- Modern principles for determining a solid waste tariff:

  Legal requirements, cost recovery, financial viability, horizontal equity, vertical equity and poverty alleviation, administrative and technical feasibility, polluter pays, transparency

- Tariff setting methodology

  Requirements of the current legislation, waste management services

- Determining waste management service costs

  Service providers, cost accounting methods, full cost accounting

- Waste management services-cost allocations

  Overall allocation of service costs, street and public area cleaning, collection, disposal, service beneficiaries

- Tariff calculation

  Determining the tariffs, revenue estimates based upon the proposed tariffs

- Tariff implementation

  Public participation, billing, fee collection, and enforcement

- Methodology summary

  Assignment of responsibility, public participation, setting the tariff

- Summary and recommendations

In April, 2016, the document was distributed to various stakeholders for revision to ensure that the opinions and visions of all parties are considered. After receiving their feedback and incorporating comments, the report will be officially submitted to the relevant governmental structures for consideration.

After approval of the methodology from the relevant governmental structures, the WMTR team will start working with the target municipalities on developing individual tariff and cost recovery plans for each municipality, in accordance with the general methodology.

Please see Annex 4. General methodology for establishing waste management tariff and cost recovery system in Georgia.

Component 4: Communication and Outreach

Pilot Project - Telavi Municipality Trustees Roundtable Meeting at the Ministry of Environment and Natural Resources Protection of Georgia

On January 21, 2016, the WMTR team organized a meeting between the Telavi Municipality trustees and the MoENRP's Service of Waste and Chemicals. Trustees from 5 pilot villages — Akura, Vanta, Busheti, Kvemo Khodasheni, and Tsinandali — participated in the meeting, along with a representative of Telavi municipality. WMTR aimed to facilitate discussion between the representatives of local and national governments on the roles and responsibilities of local governments in introducing effective waste management systems, including waste separation and recycling.

The following topics were covered during the meeting:

- Waste separation and recycling in 5 pilot villages;
- The responsibilities of local government within the Waste Management Code;
- Integrated waste management — the country's obligation within the framework of the Georgia-EU Association Agreement;
- Waste management problems in the pilot villages — lack of infrastructure, illegal dumping, waste burning in the yards, and low public awareness;
- Tariff and cost recovery system in target villages of Telavi Municipality.

According to the trustees, the main problem in their villages is related to waste collection and tariff issues. Despite the fact that the waste collection tariff in Telavi Municipality is relatively small (50 tetri per person (up to 1 Lari per household), a majority of citizens do not pay. The current manual recording system used to track of payments is not effective. The municipality plans to overhaul its tariff policy and requires assistance in its development and introduction.

Public awareness raising and the importance of behavioral change was one of the main topics of the discussion during the meeting. It was noted, that locals still use illegal dumpsites for their waste disposal despite the fact that those areas were cleaned a few months ago. The introduction of fines for illegal dumping could have an impact, however local government's capacity to carry out the policy is not sufficient.

The participants agreed that everyday work with the local population would be necessary for behavioral changes and introduction of separated waste collection and recycling systems in the villages.

Pilot project - Training for school teachers from five villages of Telavi Municipality, Kakheti Region, on non-formal education – an effective tool for professional development of teachers

On February 6–8, 2016, In order to increase awareness of waste management issues among teachers in Telavi Municipality's five pilot villages the WMTR team organized a three day training for school teachers on non-formal education. Such training is an effective tool for professional development of teachers. A total of eight school teachers from pilot villages,[2] Tsinandali, Kvemo Khodasheni, Busheti, Vanta, and Akura attended the training.

WMTR provided the teachers with information and techniques on how to work with students in an informal environment to, increase their motivation, develop the capacity, and inspire the environmentally friendly attitude required to support the introduction of integrated waste management practices in their community.

The trainings covered the following topics:

- The environment and values – responsibility, cooperation, humbleness, respect;
- Values education – creation of a value-based environment in everyday school life;
- Methodology of values education;
- Planning lessons and activities to promote different values;
- School eco-clubs – an effective tool for non-formal education, and teachers' role in this process;
- Different forms of working in a non-formal environment – eco-clubs, discussion of different possible events, programs, community and school projects, presentations, role playing, group works, debates;
- Research-based teaching and learning methods for school eco-clubs' activities – IEARN (International Education and Resource Network) practices in environmental topics and waste management educational programs;
- Silhouette theatre – an effective tool for engaging and activating students, parents and communities.

[2] Villages of a pilot project — *Piloting of Integrated Waste Management Systems in Target Areas of Telavi Municipality*

The training was held in an interactive manner. The teachers were interested in the training and actively participated in the activities. At the end of the three-day training the teachers were awarded certificates.

Experience-sharing seminars for Telavi Pilot Project school students

On February 24, 2016, the WMTR team, together with four high school students and Eco-Club members of Telavi public schools #1 and #4, visited public schools in Telavi Pilot Project villages. The goal of the meetings was to increase knowledge of waste management among school students of five pilot villages in Telavi Municipality and mobilize the community to support waste separation processes.

Through these meetings, WMTR supported discussion and experience sharing between school students on the benefits of eco-clubs on both a personal and community level, established new partnerships, and demonstrated the positive effects of eco-club activities on the environment.

Students shared information about the following topics:

- Eco-club functioning — how to found an eco-club, how to plan and implement activities, what kind of activities to take part in, and how eco-clubs can generally support community development by promoting environmentally friendly behavior;
- Personal experiences — the success of Telavi Public School #1's eco-club and personal successes of its members.

School students received their peers from the city of Telavi very positively, which laid the groundwork for their close cooperation in implementing larger-scale joint activities.

Training on Composting at College AISI in Kachreti

On February 25–26, 2016, the WMTR team held a training on composting and the development of waste separation and recycling system at Aisi College located in Kachreti Village of Kakheti Region.

Aisi Vocational College covers over 12 hectares of land, where students are able to stay and learn in one place. Equipped with modern technologies, the college offers various programs, such as in veterinary science, culinary arts, joining, electrical engineering, tourism, plastering, and bee-keeping, etc. Aisi College already has great infrastructure to start composting and implementing a waste separation scheme.

The training covered basic information on soil, its structure, ingredients and problems, composting and its processes, and which is the best organic fertilizer for soil.

The WMTR team explained the components of composting, the design of the composting bin, what should be put in it, what ingredients are harmful, and how to take care of it. Relevant staff at the college received instructions on how to construct the composting bin, taking into consideration the amount of waste generated at the college. The College used second-hand woodpiles to create the composting bin.

On March 11, 2016, based on the information received at the training, Aisi College constructed a composting box and separated waste collection bins were provided to the college to introduce a separated waste collection system.

Green Cafe seminar-discussions in public schools of Vanta and Kvemo Khodasheni

On March 2 and 4, 2016, in order to increase knowledge of the importance of waste separation and recycling, the WMTR team held 2 “Green Cafes” in public schools of the pilot villages of Vanta and Kvemo Khodasheni, together with a representative from the Environmental Information and Education Centre (EIEC) of MoENRP. The Green Café concept provides the opportunity to hold discussions in an informal and comfortable atmosphere.

The WMTR team invited school students for juice and snacks, discussed waste separation and recycling, and presented a modern approaches to waste management.

As a result of those meetings, an internet campaign was initiated which consists of separating plastic and collecting it in special green plastic bags provided by the WMTR team. Students will take photos of the process for few weeks and publish them on social media with the hashtag, #iseparatewaste. WMTR will invite the most active participants of the campaign to the EIEC office in Tbilisi, for a meeting “Green Tea with the Minister”.

E-Game: Sort and Recycle

In March 2016, the WMTR team created an educational e-game, *Sort and Recycle*, with the purpose of raising awareness of children aged 6 and above on waste separation and recycling.

The goal of the game is to help the younger generation to understand that not all waste is a garbage. The game shows how to produce useful items from waste by sorting it and further recycling it, saving natural resources and the environment.

The game consists of several stages:

- The player has to clean a room, a park or picnic area and sort waste by placing waste in pre-determined waste bins;
- After the area is cleaned, an animation starts showing a waste collection vehicle carrying the waste to a recycling facility;
- The player has to produce various products from waste in the recycling facility e.g. a plastic plate or metal spoon.

The game becomes more and more difficult with each stage. At the first stage, each item and bin has its corresponding description, which disappears after moving to the next stage. The quicker the player cleans the surroundings, and the fewer mistakes they make, the more they will score. Each time the player presses the wrong button they lose points.

The game is available on iOS, Android and Windows.

Celebration of Earth Hour 2016

On March 19, 2016, the WMTR team mobilized 25 students from the 5 pilot villages of Telavi Municipality to take part in Earth Hour celebrations in Telavi. During one hour from 20:30-21:30 the streetlights were shut off and lights went out in the main square and municipal buildings. During that hour, people gathered at the main square to celebrate Earth Hour by lighting candles and enjoying a concert by local bands and flash mobs staged by eco-club students.

On March 18-22, 2016, as part of the Earth Hour campaign, CENN Green Centre hosted a group of schoolchildren from climate change vulnerable regions across Georgia. On March 19, 2016, Minister of Environment and Natural Resources Protection of Georgia Mr. Gigla Agulashvili met with the schoolchildren to discuss the principles of the work of the ministry, its priorities, and the obligations of Georgia regarding climate change.

Students underwent a 3-day program on waste management, climate change, sustainable management of forests, and sustainable use of the mineral resources. Besides the theoretical parts of the seminars, students visited Lilo landfill, where they had a chance to learn about its functioning.

The above-mentioned activities were part of an Eco-Camp that lasted until March 22, 2016. Its aim was to raise awareness of environmental issues among schoolchildren.

The campaign took place in the framework of CENN's projects, "Waste Management Technologies in Regions (WMTR)", "Sustainable Forest Governance" and "Promoting Environmental and Social Accountability in the Mining Sector in the Caucasus".

On March 21, 2016, the WMTR team presented its e-game to the public. The event was held by CENN's forestry project in the National Library of Georgia to celebrate the International Day of Forests. The winners of the competition, "Photo Synthesis 2016" were also awarded at the event.

Presentation of e-game Sort and Recycle to 2nd grade students

On March 22, 2016, the WMTR team held an interactive seminar for 15 second grade school students at the Environmental Information and Education Centre (EIEC). The EIEC team introduced them to the principles of sustainable waste management and the importance of recycling. At the end of the seminar, the WMTR team made a presentation and demonstrated the e-Game — Sort and Recycle. The children were very enthusiastic about the game and enjoyed it very much.

WMTR hosted students from the French School of the Caucasus

On March 16, 2016, the WMTR team conducted a seminar on modern waste management practices, with a focus on plastic bags, for 17 middle school students from the French School of the Caucasus.

During the interactive seminar, students learned about the problems related to plastic bags, their negative impact on the environment, possible solutions, and alternatives to plastic bags.

The seminar motivated students to start a campaign against plastic bags at their school and at home. WMTR will support them in this initiative and will also help to plan the campaign to celebrate Earth Day on April 22.

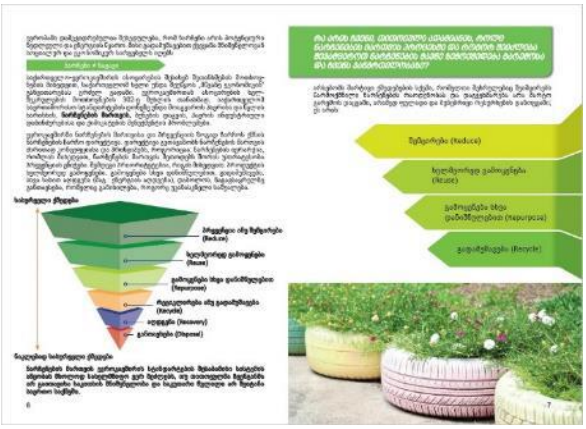
This is a very important initiative for replication of project's activities. The WMTR team will continue working with other schools in the capital to spread project activities and create precedents for proper waste management in Tbilisi.

Produce booklets, media materials, posters, trainings and other activities to introduce the concept and benefits of recycling and encourage people to recycle

4 R Brochure

In February 2016, the WMTR team developed the 4R brochure on management of household waste. The brochure provides information on global and local challenges related to waste management, modern approaches to solving these issues, and sustainable waste management principles.

The brochure will help stakeholders understand the environmental risk of improper management of waste, the role of each person in the waste management process, and how to mitigate the negative impact of waste on the environment and human health.



The brochure was distributed in all municipalities of the project target regions during the awareness raising and educational campaigns.

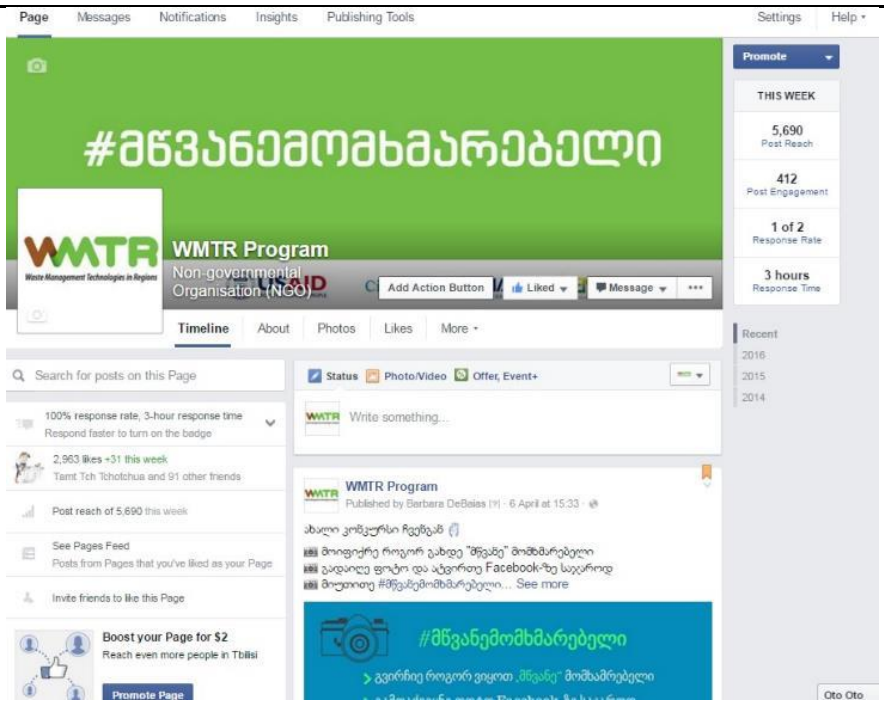
Program quarterly newsletter

The WMTR team developed the sixth quarterly newsletter in English and Georgian, and distributed it through the CENN Electronic Network, which has more than 24,000 subscribers worldwide.

The newsletter provides information about the program's goals and activities in the period of July–September 2015 and aims to keep the public informed about, and involved in, the WMTR program's implementation process.

Maintaining the eco-camp alumni Facebook page

The WMTR staff continues to update its Facebook page. Through this page the general public, including school students from the project target regions, receive updates regarding the implementation of the program — competitions, trainings, workshops, grant announcements, information about ongoing activities, and news on modern practices in waste management.



School grants competition

On November 19, 2015, the WMTR team announced a grants competition for secondary schools students in Kakheti and Adjara on an integrated approach to waste management.

The purpose of the grant program was to promote the concept of integrated waste management and the 4R principles (reduce, reuse, repurpose and recycle) among the local community. 3-7 teams of students from the 9th, 10th and 11th grades, as well as existing eco-clubs from secondary schools in Adjara and Kakheti were applicable for the grants competition.

By December 25, 2015, the WMTR team received 7 applications from both Kakheti and Adjara.

The evaluation committee reviewed the applications independently and evaluated in accordance with the following Evaluation Criteria:

1. **Strategic Fit** (maximum 50 points)
2. **Organizational Capabilities** (maximum 10 points)
3. **Gender Considerations** (maximum 10 points)
4. **Inclusiveness** (maximum 10 points)
5. **Cost Realism and Allowability** (maximum 20 points)

The maximum possible score was 100 points.

Only two applications submitted by the Telavi #1 Public School and Zemo Alvani public school passed the evaluation stage. Therefore, the WMTR team submitted to the USAID grant application for these two schools.

On March 17, 2016, USAID approved the submitted applications and Telavi #1 Public School and Zemo Alvani public school were awarded with grants. The WMTR team will submit information about the implementation of the school grants in the next quarterly report.

Newspaper articles

The WMTR team continued cooperating with various Georgian online news agencies to ensure the outreach of WMTR program activities and make them available for a broad audience. In the period of January-March 2016, the following articles were printed:

Georgia Today	USAID Donates Greenhouse Gas measuring Equipment to Georgia
Good News Agency	Georgia to Start Measuring Greenhouse Gas
Business Press News	For the First Time in Georgia the Negative Impact of Landfill's on the Environment will be Assessed
Inter Press News	Georgia to Start Measurement of Greenhouse Gas emissions on Landfills
Knews.ge	Household Waste Composition Study was Conducted in Kakheti Region
Georgia Today	WMTR Cleans Up and Repurposes Illegal Dumpsites
Inter Press News	Cleanup Campaign of Spontaneous Dumpsites has Launched
Investor.ge	WASTE NOT, WANT NOT

Table 1. Number of People Reached through Outreach Campaign

Channel of Communications	Type of Information	Size of Audience
Georgiatoday.ge, March 14, 2016. Link Social Media, Georgia Today Facebook Page, March 12, 2016	Article on GHG Equipment transfer ceremony	4,967 Likes on Facebook Page **7 Likes on post**
Good News Agency, March 17, 2016. Link Social Media, Good News Agency Facebook Page, March 17, 2016. Link	Article on GHG Equipment transfer ceremony	19,349 Likes on Facebook Page **60 Likes, 93 Shares on post**
BusinessPressNews (BPN.ge), March 14, 2016. Link Social Media, BPN Facebook Page, March 14, 2016. Link	Article on GHG Equipment transfer ceremony	35,288 Likes on Facebook Page **22 Likes on post**
Interpressnews.ge, March 14, 2016. Link	Article on GHG Equipment transfer ceremony	0 Likes
Social Media, Solid Waste Management Facebook Page, March 11, 2016 Link	Information on GHG Equipment transfer ceremony	**38 Likes on post** 1,828 Likes on Facebook Page
Social Media, CENN Facebook Page, March 11, 2016. Link	Information on GHG Equipment transfer ceremony	**13 Likes on post** 10,612 Likes on Facebook
Social media, USAID/Georgia Facebook Page, March 10, 2016 Link	Information on GHG Equipment transfer ceremony	**71 Likes, 20 Shares on post.** 10,709 Likes on Facebook Page
Social Media, Solid Waste Management Facebook Page, March 11, 2016. Link	Rustavi 2 TV reportage on GHG Equipment transfer ceremony	**19 Likes, 5 shares on post** 1,828 Likes on Facebook Page
Social media, Solid Waste Management YouTube channel, March 11, 2016, Link	Various TV reportages on GHG Equipment transfer ceremony	2 subscribers **102 views in total**
Social media, College Aisi, March 14, 2016. Link	Information on building the composting box	**21 Likes on post** 1,949 Likes on Facebook page
Social Media, Ministry of Environment Protection Facebook Page, 7 March, 2016 Link	Information on Pilot Project of Telavi Municipality	**41 Likes, 26 Shares on post** 86,741 Likes on Facebook page

Channel of Communications	Type of Information	Size of Audience
Social Media, Ministry of Environment Facebook Page, March 6, 2016. Link	Rustavi 2 TV reportage on Deputy Minister's visit to pilot project villages	**42 Likes, 2 Shares on post** 86,741 Likes on Facebook page
Social Media, Ministry of Environment Protection Facebook Page, March 6, 2016. Link	Information on Deputy Minister's visit to pilot project villages	**57 Likes on post** 86,741 Likes on Facebook page
Social Media, College Aisi Facebook Page, March 4, 2016 Link	Information on training about composting	**7 Likes on the post** 1,949 Likes on Facebook page
Social Media, College Aisi, Facebook Page, February 10, 2016 Link	Information on meeting about starting separation and composting at the college	**29 Likes on the post** 1,949 Likes on Facebook page
Knews.ge. February 19, 2016. Link	Article on composition study of Kakheti region	**32 Likes on post**
Social media, Ministry of Environment Protection Facebook Page, January 21, 2016	Information on trustees meeting at Ministry of Environment	**14 Likes, 1 Share on post** 86,741 Likes on Facebook page
Social Media, CENN Facebook page, January 18, 2016	Article on cleaning illegal dumpsites	**9 Likes, 2 Shares on post** 10,612 Likes on Facebook
Interpressnews.ge January 16, 2016 Link	Article on cleaning illegal dumpsites	**15 Likes**
Georgiatoday.ge January 15, 2016. Link Social Media, Georgia Today Facebook Page, 15 January, 2016	Article on cleaning illegal dumpsites	4,967 Likes on Facebook Page **18 Likes, 2 Shares on post**
Investor.ge. Issue 1, February-March 2016. Link	Article about WMTR's activities	2,000 copies printed. 10,000 readers
WMTR Facebook page Link		**956 new likes** Total 2,948 Likes
9 E-Digests from WMTR disseminated via CENN's online network	WMTR activities and integrated waste management-related issues	24,000 subscribers
Summary	9 E-Digests on WMTR program were developed and disseminated via CENN E-Network - **24,000 subscribers** Maestro Television – **37,016 subscribers** Interpressnews.ge – on average **50,398 unique visitors per day** Investor.ge – **10,000 readers** Number of people reached through various posts in social media is **192** (768 Views/Share/Likes divided by 4, considering that 1 person is using 4 different channels of information). Total number of people reached on average through WMTR Facebook page posts **3,856** Total number of people reached through outreach campaign – **125,462.**	

Major Activities Planned for Next Quarter

- Measurement of GHG emissions from landfills in the project target regions, in cooperation with the SWMCG;
- Conducting the spring waste composition study in Kakheti and Adjara, and development of relevant reports;
- Communication of pilot cost-benefit analysis report (landfill, recycling investment proposals, landfill remediation) of waste management investments with all stakeholders, incorporation of comments and finalization of the document;
- Developing Municipal Waste Management Plans for seven local self-government bodies in Kakheti Region and Adjara AR;
- Conducting seminars for local governments in both target regions on development of Integrated Solid Waste Management Plans;
- Implementation of the pilot project — *Piloting of Integrated Waste Management Systems in Target Areas of Telavi Municipality* — which is carried out in five selected villages in Telavi Municipality;
- Starting a waste separation pilot project in the City of Telavi in close cooperation with the local government;
- Monitoring the implementation of two school grants;
- Supporting the introduction of compositing practices at the local level in target areas;
- Implementation of City-to-City partnership activities — development of a waste management system optimization plan for Telavi;
- Closure of illegal dumpsites in cooperation with local governments in Kakheti region and Adjara AR;
- Developing a scoping statement for the closure and remediation plans of Gurjaani, Beshumi and Telavi landfills;
- Conducting at least one seminar and one training for waste collection and recycling companies;
- Development of a business and marketing plan for Zugo Ltd;
- Development of grant proposals for four recycling companies and submission to USAID for approval;
- Organization of a round-table meeting for the Waste Management Association to facilitate their cooperation with governmental structures;
- Communicating a general methodology for tariff calculation and a cost recovery scheme with all stakeholders and finalization of the report based on their feedback;
- Organization of a roundtable meetings at the national level on tariff issues for different stakeholders at central and local levels;
- Development of informational posters on the importance of developing an accurate tariff system and the significance of public involvement in this process;
- Start working on public education and outreach about enhancing cost recovery, and implementing a public awareness campaign in Kakheti region and Adjara AR;
- Installing information boards in Lagodekhi Protected Area aimed at improving waste management at the site;
- Implementation of wide-scale public education and outreach campaigns to promote the 4Rs and ISWM in Kakheti region and Adjara AR;
- Organization of competitions for school students in Kakheti region and Adjara AR;
- Organization of roundtables and trainings in Kakheti region and Adjara AR to promote the 4Rs and ISWM;
- Development and dissemination of project promo materials.