

Low Carbon Solutions through Nature Based Urban Development for Kutaisi City

Part I: Project Information

GEF ID 10643

Project Type MSP

Type of Trust Fund GET

CBIT/NGI

CBIT

Project Title

Low Carbon Solutions through Nature Based Urban Development for Kutaisi City

Countries

Georgia

Agency(ies)

UNEP

Other Executing Partner(s)

Ministry of Environmental Protection and Agriculture of Georgia (MEPA), through The Regional Environmental Centre for the Caucasus (REC Caucasus)

GEF Focal Area

Multi Focal Area

Taxonomy

Focal Areas, Land Degradation, Sustainable Land Management, Ecosystem Approach, Integrated and Crosssectoral approach, Land Degradation Neutrality, Land Cover and Land cover change, Climate Change, Climate Change Mitigation, Sustainable Urban Systems and Transport, Influencing models, Strengthen institutional capacity and decision-making, Stakeholders, Civil Society, Academia, Non-Governmental Organization, Type of Engagement, Participation, Information Dissemination, Partnership, Communications, Awareness Raising, Education, Beneficiaries, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Capacity,

Executing Partner Type

Government

Knowledge and Research, Knowledge Exchange, South-South, Capacity Development, Innovation, Knowledge Generation, Workshop, Training, Local Communities

Rio Markers Climate Change Mitigation Climate Change Mitigation 2

Climate Change Adaptation Climate Change Adaptation 0

Duration 48 In Months

Agency Fee(\$) 99,770.00

Submission Date 2/12/2021

A. Indicative Focal/Non-Focal Area Elements

Programming Direction	ons Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCM-1-2	GET	875,191.00	8,503,800.00
LD-1-4	GET	175,039.00	4,200,000.00
	Total Project Cost (\$)	1,050,230.00	12,703,800.00

B. Indicative Project description summary

Project Objective

To enable a transformative shift towards sustainable urban development within and outside of Kutaisi City of Georgia by strengthening planning and institutional frameworks, demonstrating and scaling-up investment in integrated low-carbon electric solutions in transport and sustainable land management practices.

Project Componen t	Financin g Type	Project Outcomes	Project Outputs	Trus t Fun d	GEF Amount(\$)	Co-Fin Amount(\$)
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Project Componen t	Financin g Type	Project Outcomes	Project Outputs	Trus t Fun d	GEF Amount(\$)	Co-Fin Amount(\$)
1. Strengthenin g planning and institutional frameworks enabling sustainable development in the City of Kutaisi	Technical Assistance	1.1 The Kutaisi municipality takes actions to implement low emission development (low-carbon electric public transport) strategies and sustainable land management in and around Kutaisi in close cooperation with climate change, land management and energy efficien cy related central line ministries (Ministry of Environmental Protection and Agriculture - MEPA, Ministry of Economy and Sustainable Development -MESD, Ministry of Regional Development and Infrastructure - MRDI) and local stakeholders (Local NGOs and CSOs and private sector).	 1.1.1. Municipal development policies developed leading to development of integrated land-use or other applicable spatial or urban development plan for Kutaisi based on integrated approach to promote and secure long- term CCM and SLM benefits and disseminated to policy and decision makers of Kutaisi city [This municipal development policy will support the implementatio n of the Spatial Planning, Architectural and Building Code (2018) and Rules for Development of Spatial and Urban Plans (2019)]. 1.1.2. Low emission development strategy for Kutaisi city prepared 	GET	300,000.0 0	6,673,800.00
			considering national low			

Project Componen t	Financin g Type	Project Outcomes	Project Outputs	Trus t Fun d	GEF Amount(\$)	Co-Fin Amount(\$)
2. Facilitating investment in low emission electric public transportatio n and green city development / Technical Assistance (60%) Investment (40%)	Technical Assistance	 2.1 Economic and technical feasibility of integrated municipal projects demonstrated in support of low emission development and LDN and similar integrated municipal projects replicated in similar sites in Kutaisi. [700 ha of Land under SLM around Sataplia Nature Reserve] [2.40 million metric tons CO2 eq. mitigated] 	2.1.1 Low emission electric urban transportation and green city development needs assessed, and resource mobilization strategy/plan elaborated by Kutaisi municipality. 2.1.2 Economic and financial analysis and design of low emission electric public transportation solutions from Kutaisi City to Sataplia Nature Reserve identified, investment needs assessed and	GET	454,755.0 0	4,000,000.00
		This outcome will be implemented in	disseminated to policymakers.			
		participatory planning manner with engagement of central line ministries and agencies (Ministry of Environmental Protection and Agriculture - MEPA, Ministry of Economy and Sustainable Development	2.1.3. A GCF concept note to scale up low-carbon transport in Kutaisi is developed based on the feasibility studies and analysis.			
		-MESD,	demonstration			

Project Componen t	Financin g Type	Project Outcomes	Project Outputs	Trus t Fun d	GEF Amount(\$)	Co-Fin Amount(\$)
3. Capacity development, knowledge management and M&E for integrated low carbon city development	Technical Assistance	3.1 The practitioners of Kutaisi (Kutaisi City local authorities, neighbouring municipalities in Imereti	3.1.1 Capacity needs assessment and capacity development plan prepared.	GET	200,000.0 0	900,000.00
		Region) and stakeholders (Local private sector representatives , NGOs and CSOs) apply the new knowledge and increased capacity on low-carbon electric public transport and sustainable land management [3.1.2 200 key actors from the public and private sectors demonstrate increased knowledge and capacity on low carbon electric urban transport and sustainable land management.			
		Increased score in the Capacity Development Scorecard for Kutaisi City] [Baseline and targets will be established during the PPG phase].	3.1.3 User friendly knowledge management and awareness raising system under the Kutaisi City Web Site made available for local decision makers and for the general public.			

Project Management Cost (PMC)

GET	95,475.00	1,130,000.00
Sub Total(\$)	95,475.00	1,130,000.00
Total Project Cost(\$)	1,050,230.00	12,703,800.00

Sources of Co- financing	Name of Co-financier	Type of Co- financing	Investment Mobilized	Amount(\$)
Recipient Country Government	Ministry of Environmental Protection and Agriculture of Georgia (MEPA)	In-kind	Recurrent expenditures	250,000.00
Recipient Country Government	City of Kutaisi	Grant	Investment mobilized	6,903,800.00
Recipient Country Government	City of Kutaisi	In-kind	Recurrent expenditures	4,000,000.00
Civil Society Organization	REC Caucasus	In-kind	Recurrent expenditures	900,000.00
Civil Society Organization	REC Caucasus	Grant	Investment mobilized	500,000.00
GEF Agency	UNEP	In-kind	Recurrent expenditures	150,000.00

C. Indicative sources of Co-financing for the Project by name and by type

Total Project Cost(\$) 12,703,800.00

Describe how any "Investment Mobilized" was identified

The city of Kutaisi will provide investment mobilized from their programmes and projects being implemented in Kutaisi within the context of (i) Green Cities initiative, and (ii) Mayors for Economic Growth. EBRD supported Green Cities Initiative includes investment in transportation systems in Kutaisi with supporting recurrent investments by the Ministry of Environmental Protection and Agriculture of Georgia and the City of Kutaisi. In addition, the executing agency, REC Caucasus, will support project activities related to sustainable land management with a total of US\$ 500,000 investment.

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agenc y	Trus t Fun d	Countr y	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Georgia	Climate Change	CC STAR Allocation	875,191	83,142	958,333.00
UNEP	GET	Georgia	Land Degradatio n	LD STAR Allocation	175,039	16,628	191,667.00
			Total GE	- Resources(\$)	1,050,230.0 0	99,770.0 0	1,150,000.0 0

E. Project Preparation Grant (PPG) PPG Required

PPG Amount (\$) 45,664

PPG Agency Fee (\$)

4,336

Agenc y	Trus t Fun d	Countr y	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Georgia	Climate Change	CC STAR Allocation	38,053	3,614	41,667.0 0
UNEP	GET	Georgia	Land Degradatio n	LD STAR Allocation	7,611	722	8,333.00
			Total	Project Costs(\$)	45,664.00	4,336.0 0	50,000.0 0

Core Indicators

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	
700.00 0.00 0.00	700.00	0.00	0.00	0.00	

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

	Ha (Expected at		
Ha (Expected at	CEO	Ha (Achieved at	Ha (Achieved at
PIF)	Endorsement)	MTR)	TE)

220.00

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

	Ha (Expected at		
Ha (Expected at	CEO	Ha (Achieved at	Ha (Achieved at
PIF)	Endorsement)	MTR)	TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

	Ha (Expected at		
Ha (Expected at	CEO	Ha (Achieved at	Ha (Achieved at
PIF)	Endorsement)	MTR)	TE)

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)	
480.00				

Documents (Please upload document(s) that justifies the HCVF)

Title

Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	100000	0	0	0
Expected metric tons of CO?e (indirect)	2396695	0	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	100,000			
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting	2021			
Duration of accounting	20			

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)				
Expected metric tons of CO?e (indirect)	2,396,695			
Anticipated start year of accounting	2021			
Duration of accounting	20			

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)	32,976,541			

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

	Capacity (MW)	Capacity (MW)	Capacity (MW)	Capacity (MW)
Technolog y	(Expected at PIF)	(Expected at CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	28,080			
Male	26,000			
Total	54080	0	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

The target for core indicator (6) [Greenhouse Gas Emissions Mitigated] has been established with a view of estimated CO2 reduction in total of 2.40 million metric tons of CO2 for a period of 20 years (2020-2040). Methodology applied on projections for emissions trajectory up to 2030 has been provided by analysis of trends of BAU scenario developed in Georgia?s INDC for the period up to 2030 and updated calculations by Kutaisi City. More details on assumptions and calculations on 2030 BAU scenario and projection is provided in Section 2.2 Local Sustainable Energy and Climate Change Planning Framework. Kutaisi Transportation emission estimates are provided in Annex D.

Part II. Project Justification

1a. Project Description

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed

? Urban development in Georgia, as is the case practically of all former post-soviet countries is characterized by the fact that basic public infrastructure and services covered urban areas almost universally. This has been one of the most valuable urban legacies of the Soviet period - a time when the adequate provision of essential infrastructure and services was a clearly stated public goal. The basic elements of the urban infrastructure systems - roads, water and sewer mains, power and telephone lines, educational, recreational and health facilities - were built during the first decades after World War II. Subsequent extensions and upgrades were made during the 1970s; however, since 1980s investment has become inadequate and covered only a minor share of needs to maintain and improve urban infrastructure. This strategy led to prolonged disinvestment in inner-city neighbourhoods, whose infrastructure began to crumble. It should also be noted that, due to the emphasis on quantity rather than quality, the extensive coverage of urban areas with basic infrastructure was often accomplished at the expense of its quality and reliability let alone efficiency of resources use and environmental sustainability.

? Thus, by the early 1990s, Georgia inherited extensive, but highly inefficient urban infrastructure, which showed serious signs of ageing and required urgent renovation. The much-needed upgrade did not take place during the transition period. On the contrary, funding for infrastructure expansion and maintenance was severely curtailed due to the economic crisis and the dramatic withdrawal of state subsidies from municipal affairs. The situation was further exacerbated by the new patterns of urban development characterized by haphazard, unplanned and often unauthorized construction activities, and the lack of basic spatial coordination. Following the post-2000 economic recovery of the country, the pace of private investment in urban development clearly began to outpace the ability of national and local governments to match adequate basic public transport/urban infrastructure (infrastructure for public transport, highways, intercity and city roads, streets, urban green areas, water supply and sewage systems etc.) with it. As a result, today, Georgian cities, including Kutaisi, are facing severe challenges in the provision of quality public infrastructure and services to its urban residents; the other negative side of it is the deterioration of the urban environment as manifested in a high level of local pollution, as well as GHG emissions, also due to low building standards and building codes, and land degradation.

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Urban transport has been the primary driver for increased GHG emissions - from 58%-60% out of total GHG emissions for all sectors[1]¹ since 2012 (see more details in Table 1: Greenhouse gas emissions in

Kutaisi in 2012 and 2020). Automobile use has skyrocketed. The new reality of heavy individual car travel has placed a heavy burden on the existing road infrastructure. The street network designed and constructed half a century ago with the idea of carrying vehicular traffic several times below current levels is experiencing major difficulties handling the new traffic volumes. According to Sustainable Energy Action Plan (SEAP) of Kutaisi City, road infrastructure is almost entirely amortized; thoroughly rehabilitated roads are already damaged and in most of the places fundamental reconstruction is required; poor condition of roads impedes vehicle movements and increases CO2 emissions^{[2]²}. Road maintenance and upgrade are effective actions to reduce emissions from road transport[3]³. In 2017, an alliance of road-related industries in Europe showed how an upgrade of one third of the entire road network of Europe by 2030 could lead to yearly savings of 14 million tons of CO2; if two thirds of the network were upgraded, this could be 28 million tons of CO2 saved yearly and this would be the equivalent of replacing 6 million internal combustion cars with zero-emission cars [4]⁴. In an attempt to alleviate congestion, Kutaisi authorities have concentrated the majority of investments in road capacity improvements. This policy has had limited impact on improving traffic flows as it has simply generated more automobile use and contributed to a rise in GHG emissions. Public transit systems have been particularly hurt by these transportation policies. The drastic reduction in subsidies for the mass-transit sector has decreased the share of urban trips carried by public transit from 80 to 90 % at the end of the 1980s to 50 % in recent years. Placing so much emphasis on road construction and the needs of private vehicles has further reduced the availability of funding for public transport.

The City of Kutaisi

? Kutaisi is Georgia?s second largest city (after Capital City of Tbilisi^{[5]5}) with the population of near 135,200 people^{[6]6} as of January 1, 2020 (3.64% of the population of Georgia), of which 70,200 women (52%) and 65,000 men (48%)^{[7]7}. The share of the urban population is 100%. It is the center of Imereti region, which involves 11 municipalities, including City of Kutaisi, and is one of the largest urban conglomerates in the country: 24.1% of urban population of West Georgia lives in Kutaisi. The city?s current tourism development program^{[8]8} aims at designating Kutaisi as a major touristic center of West Georgia, which is rich with nature conservation sites. Kutaisi lies at an elevation of 125-300 meters above sea level and is surrounded by mountains and woodlands of 250 000 ha ? thus having an exceptional opportunity for developing adventure travel and ecotourism. To the east and north-east,

Kutaisi is bounded by the Northern Imereti Foothills, to the north by the Samgurali Range and to the west and the south by the Kolkheti Lowland.

? Sataplia Nature Reserve is located 10 km from Kutaisi. Mount Sataplia?s Mediterranean type forest ? Colhic Forest (98% of the area) has both the high mountain and lowland subtropical flora. There are many tree species threatened with extinction. Jackals, foxes, squirrels, martens and badgers are native species of the park. Kutaisi?s surroundings abound with numerous natural attractions providing the potential for ecotourism. However, the means of direct public transport connection between Kutaisi and Sataplia is limited in number and size. Therefore, recreational opportunities for Kutaisi residents as well as for tourists are limited regarding the easy access to this natural site.

? The economy of Kutaisi before the 90s of last century had been mainly based on large-scale manufacturing sector (manufacturing of trucks, tractors, fabricated metal products, machinery and equipment, chemical products, aircraft repairing etc.), employing about 55 thousand people in 1990. After the restoration of independence of Georgia in 1991, the process of deindustrialization had begun, followed by a sharp decline in manufacturing. The introduction of free-market economy principles led to fundamental structural changes in the city?s economy. As a result, many inhabitants of Kutaisi have had to seek workplaces outside the city[9]⁹. Today, the manufacturing industry is not the main driving force of the city?s economy, which is evidenced by the fact that in 2018 39% of the employed population in Kutaisi worked in the trade and services sectors, followed by education and sports - 18%, health care - 10%, miscellaneous - 22% and only 11% were engaged in the manufacturing industry. In 2019 the Kutaisi City Local Economic Development Plan (LEDP) for 2019-2020[10]¹⁰ was approved on the basis of the EU?s ?Mayors for Economic Growth? Initiative (M4EG)[11]¹¹ methodology. In the framework of this initiative and the technical support of the EU, Kutaisi City LEDP was developed. This is a medium-term document created for the purposes of economic growth and job creation at the local level. According to the LEDP, the tourism sector is one of the priority areas in the city economy. Kutaisi, using the tourist potential of Imereti Region, substantially competes with other regions of the country. The uniqueness of the region is due to its ancient historical and cultural heritage, diverse nature and natural monuments, wine and cuisine, mineral therapeutic and drinking waters, balneological and spa resorts, and great culture of hospitality. In terms of tourism, the city has the potential to become a regional management center, which will be able to create joint regional services, products, brands and promote their popularity. This will in turn, enhance visibility in internal and external positions; increase the number of visitors and revenues in the tourism sector. The city, with its landscape and climatic conditions, provides the opportunity for using alternative and renewable energy sources. Kutaisi is trying to cope with social and economic problems. State investment, government programs and the local budget are not sufficient for the inclusive economic development of the city. The lack of private investments, innovations, and new technologies is becoming clearly noticeable. Resource-saving technologies and energy-efficient systems are underdeveloped in the private and public sectors.

? The city is located along transport highway, it is close to major seaports (Batumi - 130 km, Poti - 102 km) and has an international airport in the vicinity. The airport is used not only by local inhabitants but by all Western Georgia and surges of foreign tourists. More than 600 thousand travellers have been using its services during the years of 2014-2017 since the opening (September 2014) and the dynamics is constantly growing, In 2019, the number of travellers increased to 873,616, which was about 256,000 more than 2018 figures. According to the International Council of Airports (ACI Europe) reports[12]¹² the airport of Kutaisi is one of the leading airports across Europe in terms of the growth of passenger flow that for 2019 was estimated as annual 111.3% of growth rate.

? Several important highways pass through the city, in particular, connection roads to Kutaisi-Tskaltubo-Tsageri-Lentekhi, Kutaisi-Baghdati-Vani and Kutaisi-Tskaltubo-Ambrolauri. From Kutaisi, buses leave to all major cities of Georgia several times a day. As of 01 January 2020, the city?s public transport had 227 vehicles (buses and minibuses) in total with an average age of 17-20 years.

? Climate Change Adaptation and Mitigation Strategy Paper[13]¹³ of Kutaisi identified the following key challenges and vulnerabilities:

o *Natural disasters* -Among the natural threats, hurricanes are the most significant for the city of Kutaisi.

o *Transport and transport infrastructure* - Because of the noncomprehensive planning and organization of the public transport, doubling of the number of privately owned vehicles is expected in the next 10 years. It is expected that the cars which will be imported will be mostly second-hand cars, which will further aggravate the problem of air pollution and GHG emissions.

GHG emissions from transport in Kutaisi

? According to the 3rd national communication of Georgia to UNFCCC and Georgia's Second Biennial Update Report[14]¹⁴

the transport sector is the most significant primary source of increased GHG emissions (*due to the growing private car ownership and a majority share of second-hand private cars in this park*), followed by buildings, and driven by urbanization and inefficient public transportation and energy efficiency systems (see Table 1). Kutaisi city has a key role in GHG emissions in Georgia. Total fuel consumption in Kutaisi reached about 29.5 million liters of gasoline, 23.4 million liters of diesel and 8.3 m3 of gas.

Table 1: Greenhouse gas emissions in Kutaisi

Source	GHG emissions, t CO2eq
	2019
Transport	262,069
Buildings	145,693
Street lighting	1,604
Waste	28,350
Total	437,717

Source: Kutaisi City Administration, 2020

? Stakeholder consultations in the city of Kutaisi revealed that the transport sector has been up until now largely neglected despite the fact that it is the largest source of GHG emissions in the City. In addition, the city?s road infrastructure is almost entirely outdated nowadays and in most of the places require fundamental reconstruction as the poor condition of roads impedes vehicle movements and increases CO2 emissions.

? According to Kutaisi City Administration, in 2019 about 35 million passengers were carried by public transport (buses and minibuses). The fleet is formed of old buses. There are no incentives for introducing hybrid or electric vehicles or for converting diesel buses to dual fuel diesel/compressed natural gas (CNG) buses. The following table shows vehicles that served the city as public transport in 2019.

	Working Daily
Bus (with 40-50 seats)	67
Minibus (with 15-20 seats)	160
Sum	227

Table 2: Number of Public Transport Vehicles (Buses and Minibuses) in Kutaisi for 2019

Source: Kutaisi City Administration, 2020

? Recent years showed growing demand for public transport and the need for planning of new public transport routes. However, the ageing public transport fleet (*and in addition over 650 private taxis, most of which are older than 10 years*) is making limitation to the eco-friendly mode of transportation by consuming more fuel that has a significant impact on GHG emissions in Kutaisi.

Land degradation, land use changes, forest degradation and deforestation in Kutaisi

? A considerable amount of GHG emissions come from transportation and construction sectors in Kutaisi; other contributors include land use changes (conversion of forested areas to farmland, and to build up areas) and land degradation (due to strong wind erosion[15]¹⁵). According to Kutaisi climate change adaptation and mitigation paper (2016), elaborated by the Georgian National Association of Local Authorities (NALAG), with support of USAID[16]¹⁶, the most acute land-related problem is land erosion (wind erosion) (100 ha of the city territory) due to poor land management practices, such as the conversion of forested areas to built-up areas (settlement, commercial areas and others). The loss of forest cover, which serves as windbreaks for the city, increases the wind erosion risk. The city does not have a land use master plan and natural disasters plan.

? Kutaisi is categorized as an environmentally high sensitive area due to forest cover within the Kutaisi city boundaries. The major forested area is Sagoria Forest expanding over 480 Ha, where the dominant tree species is oak. These forests provide important ecosystem services such as maintenance of soil quality and the provision of organic materials; limiting of erosion and protection of soil from the direct impact of rainfall; modulating climate and storing GHG emissions, and being key components of biodiversity as a habitat for other species. However, environmental degradation has negative effects because of the reductions in natural ecosystem services. The urban poor, who usually have a higher proportion of women and often have limited access to basic services, are particularly vulnerable to environmental degradation due to lack of traditional or informal safety net arrangements or coping mechanisms in times of shocks and stresses caused by environmental degradation (*air and water pollution, climate change impacts, environmental hazards, floods and landslides etc.*).

? Even though 40% of Georgia?s territory is covered by forest, the average density of a significant part of its forests is less than 50%. Green zones with natural forests which currently occupies about 700 ha in Kutaisi (*more than 10% of the city territory*) have been illegally logged due to nation-wide severe energy crisis and widespread reliance on fuelwood for heating in 1990s. During the same period, almost 2,500 ha of natural forests in surrounding areas of the city were also subject to illegal logging for fuelwood that has resulted in a loss of natural forest. In the past, these forests were functioning as a natural barrier, protecting the city territories, avoiding land degradation and wind erosion. Further degradation could cause a sharp decline in protection functions and self-restoration ability of the remaining forests.

Barriers to be addressed:

? The long-term solution to afore-mentioned challenges is a transformative shift towards integrated sustainable urban development in Kutaisi city. However, the following barriers are preventing the solution.

<u>Weak planning and institutional framework and capacities for integrated sustainable urban</u> <u>development in Kutaisi</u>

? Despite a strong interest in sustainable urban development, and sustainable transport, the City of Kutaisi does not have any integrated sustainable urban development or spatial panning document. There is no capacity or experience in use of analytical works undertaken through the use of GIS or other innovative tools linked to urban sustainability. The current policies and regulations do not promote a shift to a green path in city development. Although SEAP[17]¹⁷ for 2015-2020 was developed and adopted by Kutaisi City in 2014, it lacked integration into broader spectrum of urban development planning tools and instruments and specific technical transport related renovative actions and investment calculations to be implemented. Development of sustainable city policies requires stakeholder engagement across government, private sector, and civil society. The local policies need stronger linkages with national level planning.

Lack of examples and consequently limited investment in low emission electric urban transportation, green city development and sustainable land management

? Kutaisi City has insufficient capacity to demonstrate the economic and financial feasibility of a low emission urban transport system. Exposure to best international practices for energy efficiency or sustainable urban transportation is lacking for Kutaisi. With high capital costs associated with urban transport, the Kutaisi city officials face barriers to finance low carbon urban transportation projects. There is not any feasibility study that demonstrates the long-term economic benefits of sustainable infrastructure, building or urban transportation options for Kutaisi. There is a lack of good practices and demonstrations of low carbon urban transportation in Kutaisi. In order for Kutaisi to adopt energy efficiency standards and sustainable urban transportation, evidence and demonstrations are needed.

? Similarly, Kutaisi City has limited capacity, experience, and resources to apply SLM practices in an urban-peri-urban environment. Kutaisi City does not have capacity and knowledge for mapping and assessment of urban and peri-urban ecosystems and their services in order to help design or implement policy on green development. The city does not have enough capacity to analyze what challenges the city must meet to enhance the use of nature-based solutions. Kutaisi city lacks experience and best practices that provide evidence on how nature-based SLM practices enhance sustainable green urban development. Green city concept under recently approved EBRD?s Initiative Green Cities Georgia[18]¹⁸ serves as a sector-wide catalyst for addressing environmental challenges at the City level. This is planned to be achieved through the preparation and subsequent implementation of Green City Action Plans ('GCAP')[19]¹⁹. GCAP methodology takes a systematic approach to identify, benchmark, prioritize and guide green city actions by cities. Kutaisi City may benefit from the said initiative by adopting and integrated green city development approaches in SLM based land use planning and implementation.

? Sataplia Nature Reserve, one of the oldest nature reserves of Georgia, is just 10 km away but public transportation is limited. Therefore, Kutaisi residents cannot benefit and acknowledge the role and importance of sustainable use of this nature reserve for urban life without threatening its conservation values.

Limited capacity, information and awareness on integrated low carbon city development

? Lack of awareness and knowledge concerning the low carbon urban development in Kutaisi is particularly poor among local authorities, local representatives of ministries, the private sector and the general public. This relates to the knowledge about the planning for low-carbon electric public transport in combination with SLM bases land use planning best practices. The City does not have the means to disseminate information about the benefits of low carbon public transportation and the role of surrounding nature on healthy life in Kutaisi. There is also a lack of awareness in Kutaisi among the general public of the benefits of energy saving in the transport sector or in public infrastructure as such and the role of green landscapes in the quality of urban life. The general public has limited knowledge about the advantages of more sustainable modes of transportation such as cycling and public transport.

2) Baseline scenario

2.1 Urban and spatial planning framework

? The 1st full-scale master plan for Kutaisi was developed after World War II, the second master plan in the mid 1950?s and the third (and the last) one in 1975[20]²⁰. All three master plans were preceded by and based on feasibility studies, transport and settlement schemes, forecasts and other related development thematic documents for that time. It has to be mentioned that the latest plan was

developed for the period of 1975-2025 with view of assumed 450,000-750,000 of population for 2025[21]²¹.

? During the first decade after independence from the Soviet Union, the main focus of land reform in Georgia was privatizing land, registering it and taxing it. As part of the post-revolutionary reform efforts, the Government turned its attention to developing a planning strategy for land use and construction in urban areas. In 2018 the Parliament enacted new Spatial Planning, Architectural and Building Code[22]²² which replaced the Spatial Planning and Building Act of 2005. The new Code, based on the best European practices, specifies goals and tasks for spatial planning at national and local levels, identifies responsible authorities for planning and spells out the types of spatial and urban planning covered by the Code and the hierarchy of the planning process. According to the above-mentioned Code, plans are divided into (1) Spatial plans and (2) Urban plans. Spatial plans, in turn, are divided into National Spatial Plan (*country level*) and District Spatial Plans (district level). The planning documents for developing of urban areas (*cities and urban settlements*) are: City Master Plans (city-level); City/Urban Settlement Housing Plans (*city and urban settlement level*) and City Unit/Urban Settlement Detailed Housing Plans (*sub-city and urban settlement level*)? see in the related table below:

Plan Category	National Level	Local Level		
		District Level	City Level	Urban Settlement Level
Spatial Plan	National Spatial Plan			
Spatial Plan / Urban Plan		District Spatial Plan	City Master Plan	

Urban Plan		City Housing Plan	Urban Settlement Housing Plan
Urban Plan		City Unit Detailed Housing Plan	Urban Settlement Detailed Housing Plan

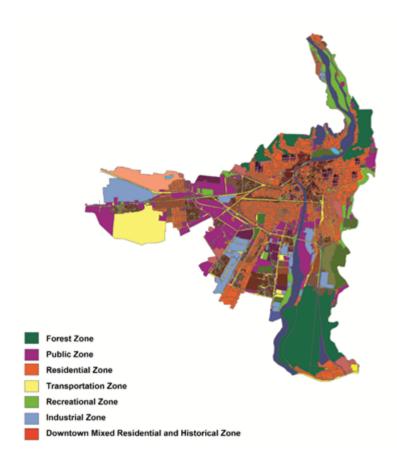
? Content, methodology, minimum standards and procedures for development, review and approval of spatial and urban plans are provided by two legally binding documents: Spatial Planning, Architectural and Building Code of 2018 and Rules for Development of Spatial and Urban Plans of 2019[23]²³.

? Currently, master plans for the use and development of urban land exist for three of Georgia?s large cities (Tbilisi, Batumi, Zugdidi) and number of small touristic resort towns and settlements. However, zoning maps have also been drawn up for some cities including Kutaisi. The rest of the country?s cities and towns still await plans.

? Due to Kutaisi?s status as a self-governing city, the local level of government makes all land use decisions in Kutaisi. Because land use decisions affect private property, all requests to change designated land uses (usually referred to as ?zoning changes?) must be made by elected officials, never by City Administration (?*City Hall*?) staff. In short, elected Kutaisi City Council (?*Sakrebulo*?) is responsible for valuable economic, natural and urban community resources, and its decisions have lasting impacts.

? In 2016, Kutaisi developed a zoning map (Figure 1); however not any other upper level spatial and/or urban development planning document is available at this moment. With this regard, it has to be mentioned, that according to Spatial Planning, Architectural and Building Code of 2018, all spatial and urban planning documents, that were adopted before 2018, will maintain their legal force until they are replaced by plans developed and adopted in line with new Code of 2018.

Figure 1: City zoning map as of 2020[24]²⁴



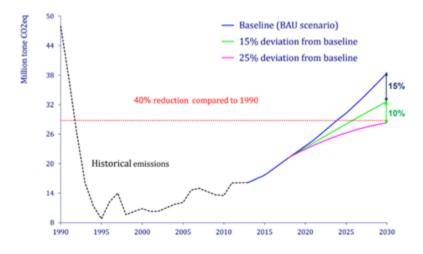
? At present, Kutaisi intends to develop City Master Plan (also known as ?*City General Plan*?) and City Housing Plan (also known as ?*Housing Development Regulatory Plan*?). For that purpose, about 130,000 USD is already allocated by Kutaisi City Budget of 2020[25]²⁵ under the special budgetary program[26]²⁶ for (a) Primary data gathering and analyses for drafting of Terms of Reference and (b) Preparation of Terms of Reference for elaboration of (i) Kutaisi City Master Plan and (ii) Kutaisi City Housing Plan. Announcement of tender for a sub-contract to procure consulting services for the above tasks is planned in 2020, while completion of tasks is foreseen for 2021. This stage will be further followed by start of development of City Master Plan and Housing Plan.

2.2 Local Sustainable Energy and Climate Change Planning Framework

Methodology applied on projections for emissions trajectory up to 2030 has been provided by analysis of trends of BAU scenario developed in Georgia?s INDC for the period up to 2030 and updated calculations by Kutaisi City and data in latest Georgia?s Second Biennial Update Report[27]²⁷ under

the UNFCCC of 2019 and Draft National Sustainable Energy Action Plan[28]²⁸ of Georgia prepared for 2018-2030.

Under the INDC[29]²⁹ Georgia planned to unconditionally reduce its GHG emissions by 15% below the Business as usual scenario (BAU) for the year 2030. This is equal to a reduction in emission intensity per unit of GDP by approximately 34% from 2013 to 2030. The 15% reduction target will be increased up to 25% in a conditional manner, subject to a global agreement addressing the importance of technical cooperation, access to low-cost financial resources and technology transfer. This is equal to a reduction of emission intensity per unit of GDP by approximately 43% from 2013 to 2030. The 25% reduction below the BAU scenario would also ensure that Georgian GHG emissions by 2030 will stay by 40% below the 1990 levels - see in figure below:



Three main sectors related to GHG emissions were considered for Kutaisi City: transport, buildings and infrastructures (landfills, outdoor lighting) and green spaces. Transport is also identified by Kutaisi City as the priority sector for energy saving and climate change mitigation in the city: it is by far the largest source of GHG emission reduction and proposed a number of low-carbon urban transport solutions, such as improvement in public transport services, upgrade of the municipal transport fleet, development of non-motorized transport options, improvement in parking policy and etc. City planned to spend more than US\$ 6 million during 2015-2020 to implement priority measures envisaged by its latest SEAP.

Main drivers for projecting future emissions up to 2030 are economic activities and growth rate described at national level under INDC and at the local level for Kutaisi. The drives and key assumptions are outlined below:

? The emissions based on BAU scenario is projected by applying extrapolation method;

? The mitigation scenario assumes that Kutaisi city follows the CoM target for the east neighbourhood as set 30% emission deviation from the BAU scenario.

? The sectoral emission reductions are based on the following circumstances: transport emissions limitations could be around 28 per-cent comparing to BAU scenario, while the building sector has a capacity to reduce emissions about 30%, street lighting and waste sectors are projected to overcome 50% emission reductions.

Results of the above projections for emissions trajectory up to 2030 are shown in figure 2 below:

Figure 2: Urban GHG Emissions Projection in Kutaisi: 2030 (baseline scenario)

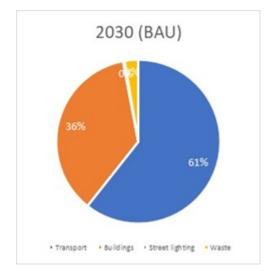


Figure 2a. Emissions distribution according to sectors in 2030 (in %)

Figure 2b. Emissions in Transport Sector in 2020 and 2030 BAU scenarios and 2030 Projection (t CO2)

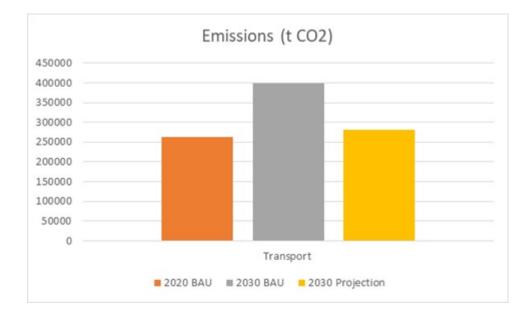


Figure 2c. Emissions in Building Sector in 2020 and 2030 BAU scenarios and 2030 Projection (t CO2)

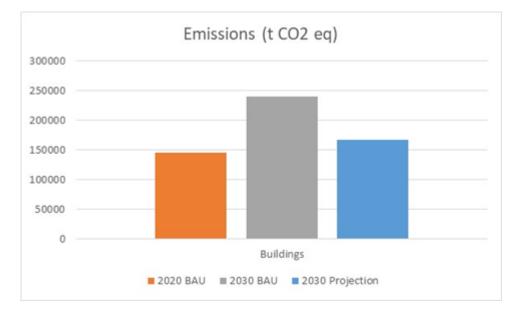


Figure 2d. Emissions in in Street Lighting Sector in 2020 and 2030 BAU scenarios and 2030 Projection (t CO2)

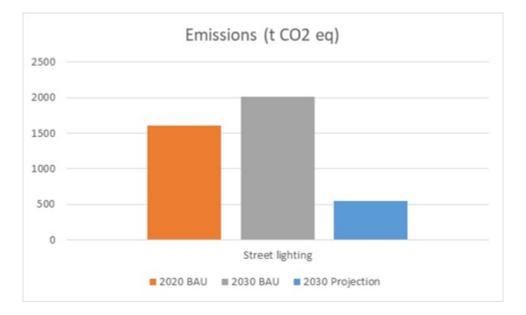
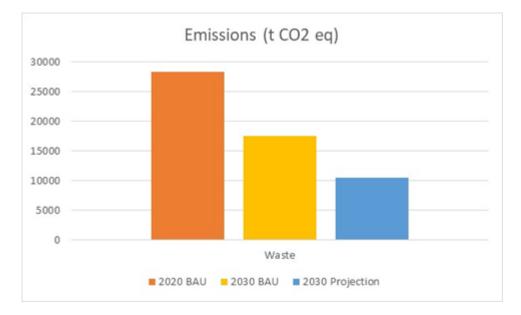


Figure 2e. Emissions projection in Waste Sector in in 2020 and 2030 BAU scenarios and 2030 Projection (t CO2)

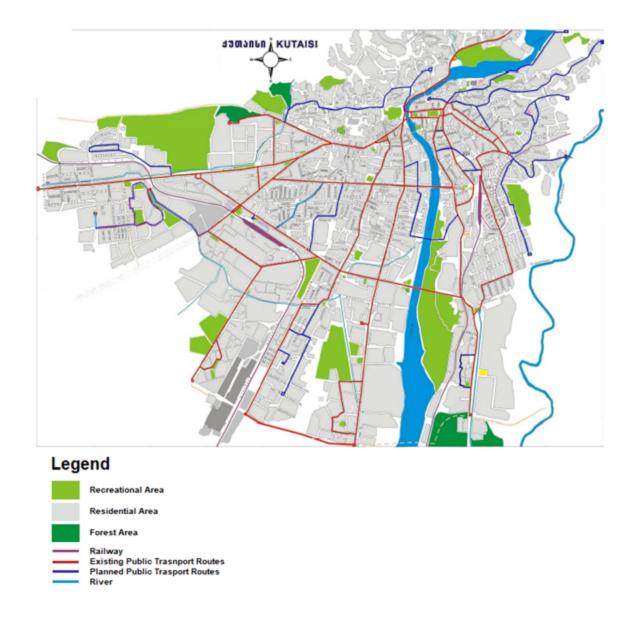


? However, Kutaisi does not have an integrated and/or general transport plan. The transport planning process is limited to drawing of city scheme for public transport routes (Figure 3) and estimations of the passenger turn-over. According to Kutaisi City Administration, the baseline provided for about US\$ 7 million for last 3 years (2018-2020) for maintenance and operational costs for public transport and road infrastructure is envisaged to be sourced from local municipal budget of Kutaisi

(supported to some extent through transfers from the central budget). This envisaged funding for transport improvement is applied to cover maintenance and operational costs for the existing public transport fleet.

? Energy efficiency measures are considered as a source of significant reduction of energy expenses in buildings. Those measures involve several common approaches, including energy consumption requirements management, hole filling quality improvement, automatic regulation of administration, automatic hydraulic balancing of heating system, installation of thermostatic valves on radiators, additional insulation of constructions and etc.

Figure 3: City scheme showing public transport routes as of 2020[30]³⁰



Parking plan. In February 2019, the City updated its Parking Plan[31]³¹ providing overall for
 4.5 ha of parking places.

? Regarding green space (442.8 ha in total not including 700 ha of forest area)[32]³² development, the state of Kutaisi environment has been significantly worsening during the last decades. One of the reasons is a continuing loss of green cover starting from the 90s of last century. Currently,

out of total 442.8 ha of green space Kutaisi recreational zone covers 221.4 ha. There are public gardens with total area of 4 ha (4 units), squares with total area of 20.4 ha (107 units), one park of 7 ha, lawns of 21.4 ha and one Botanical Garden with the area of 14.7 ha. Green cover at the city cemeteries occupies 88.8 ha. Green areas adjacent to private houses, living buildings, different offices and institutions, occupy in total 65.1 ha. About 140 thousand wood plants are distributed in the mentioned recreational areas. Most frequently there can be seen following species: Plane, Aspen, Zelkova, Cedar, Cypress, Willow, and Palm. Major parts of trees were planted in the 50 ? 60s of the last century. A comprehensive inventory of these plantings has not been conducted and data available for today is not precise.

? Kutaisi city has committed to reducing GHG emissions by 23% by 2030 under the agreement signed between Kutaisi City and European Commission, as part of Covenant of Mayors (CoM), which was approved by the City Administration.

2.3. National Climate Change and Land Degradation Policy and Planning Framework

? Georgia?s officially submitted nationally determined contributions (INDC) are highlighting the need for addressing both climate change adaptation and mitigation. Through the INDC, Georgia communicated its intention to reduce greenhouse gas (GHG) emissions by at least 15% below the business-as-usual scenario by 2030. The INDC considers the key sectors as main contributors for mitigation policy implementation in the country, including energy, agriculture, waste and industry. The document highlights the pre-2020 measures for addressing emission reductions. The building and transport sector are the priority areas of NAMAs (Nationally Appropriate Mitigation Actions).

? Low Emission Development (LED) Strategy for Georgia: Under USAID-funded ?Enhancing Capacity for Low Emission Development Strategies (EC-LEDS) Clean Energy Program in Georgia? support is being provided to implement climate change mitigation measures, in particular in the area of energy efficiency and clean energy. The EC-LEDS program supports Georgian municipalities in institutionalizing and implementing climate change mitigation measures; promotes and facilitates private- sector investments in energy efficiency and green buildings; and builds the capacity of the Government of Georgia (GoG) to develop and implement a national LED Strategy.

? As of early 2020, there is no officially adopted sustainable transport policy for Georgia and no national transport plan that promotes low carbon development and provides economic benefits. Imported fossil fuel costs in Georgia play a big negative role in the trade deficit of Georgia. In addition, increased air pollution from the transport sector leads to rising health costs. Limitation in greening the transport sector limits Georgia?s position to become a regional trade hub and tourism destination. ?The policy framework for Green Transportation in Georgia? developed by the World Bank focuses at the

national level and is yet to be implemented. A new law on transport for Georgia is yet to be adopted and a national transport plan is also not finalized.

As of July 2017, Georgia became a party to the Energy Community Treaty[33]³³. By adopting ? the Energy Community Treaty, Georgia made legally binding commitments to adopt core EU energy legislation, the so-called "acquis communautaire?. In line with its obligations, from December 2019 to May 2020 Georgia consistently adopted key energy efficiency legal acts: Energy Efficiency Act[34]³⁴, Energy Labelling Act[35]³⁵ and Energy Performance of Buildings Act[36]³⁶ transposing the EU directives in this field. Energy Efficiency Act of 2020 transposes EU Directive 2012/27/EU on Energy Efficiency and creates framework for energy efficiency policy in Georgia, including adoption of energy efficiency target and national action plan for energy efficiency. It further promotes exemplary role of the public sector and envisages secondary legislating for design of the energy efficiency obligation scheme, energy management and energy audits scheme. The Ministry of Economy and Sustainable Development (MESD) in cooperation with other state institutions will work on the preparation of secondary legislation necessary for the implementation of the Act, most of them to be adopted within the period of 12 months after the date of adoption of the Act. By adopting these three acts, Georgia paves the way for significant investments in energy renovation programmes (with emphases on public building renovation programmes) in the amount of EUR 80 million from EBRD and the German Bank KfW, as well as EUR 26 million in investment grants and EUR 8.5 million in technical assistance from the EU. The reforms will also be financially supported with a EUR 150 million policy-based loan tranche from KfW and the French Agency for Development AFD. These will help the country to manage to stay on course with market-oriented and sustainable energy reforms and provides an important national backdrop and support mechanism for Kutaisi City in developing the building efficiency codes and standards, as well as incentive packages and investment, needs assessment envisaged for the proposed project.

? Georgia has shown clear drive to combat land degradation and improve land management systems by moving forward with a number of policy and strategy documents such as Georgia?s National Action Programme to Combat Desertification (NAP), a new agricultural strategy and a new national forest policy. Georgia?s NAP aims at integrating the aspects of the NAP into sectoral and investment planning and policy documents; informing at least 40% of decision makers and 30% of the population about the issues of desertification/ land degradation and drought and their relevance with biodiversity and climate change, and increasing awareness of community-based organisations and scientific institutions on the threats of desertification/land degradation/drought by 2020.

? Georgia as a Party of UNCCD took part in the Land Degradation Neutrality (LDN) target setting Programme (LDN TSP) and defined national LDN targets, committing about 1500 ha of degraded forests to be afforested and about 7500 ha to be reforested and 60% of forests to be managed sustainably by 2030.

2.4. Baseline projects

? In addition to above-mentioned strategies, plans and initiatives, namely the

? Kutaisi Master Plan 1975-2025;

? Kutaisi Zoning Map;

 Kutaisi City Local Economic Development Plan (LEDP) - "Old City with New Opportunities" (2019-2020);

? Kutaisi City Development Strategy - ?Kutaisi-2021? (2016-2021);

? National Programme for Regional Development 2018-2021;

? National Initiative on Energy Performance of Buildings;

the following projects also contribute to the proposed project?s baseline:

EBRD?s Programme: Green Cities Framework - Pre- & Post-Signing TC Support: Green Cities Action Plan & Policy Dialogue. In 2016 the European Bank for Reconstruction and Development (EBRD) launched the development of the Green Cities Initiative as a response to address multiple urban issues in a more systematic way in the Bank's countries of operation (including Georgia). As a core part of this Initiative, the Bank worked with the Organisation for Economic Cooperation and Development (OECD) and the International Council for Local Environmental Initiatives (ICLEI) to prepare a methodology for the development of Green City Action Plans (GCAPs). The methodology is designed to guide a City through the 5 main steps of developing and implementing a GCAP: establishing a Green City Baseline; developing a vision; preparing the GCAP; implementing the actions, and reviewing progress.

EBRD?s Initiative Green Cities Georgia[37]³⁷. The EBRD is considering the development of the Framework (FW) to support municipal investments by addressing key environmental challenges a

number of Georgian cities are facing. While initial loans will be sovereign with on-lending to Cities and utility companies, the FW will also pursue non-sovereign lending structures. The FW will seek to mobilize grant financing from international donors for capital investments and technical cooperation to support the broader transition objectives, implementation support and policy dialogue. The FW will also include engagement with local communities on the benefits of the Green City initiative. As part of this initiative, EBRD approved a new program titled Georgia Urban Transport Enhancement Programme[38]³⁸. This program envisages greening the public transportation of 6 cities in Georgia and Kutaisi is one of the prioritized cities. The total cost of the program is about USD 29 million. The allocation from this program to Kutaisi will be clarified at the PPG phase.

? **UNEP/GEF** Project: Georgia?s Integrated Transparency Framework for Implementation of the Paris Agreement (2019-2023). Georgia is implementing a medium-size Project on Georgia?s Integrated Transparency Framework for Implementation of the Paris Agreement in the framework of GEF?s Capacity Building Initiative For Transparency (CBIT)[39]³⁹. The CBIT has three aims: Strengthen national institutions for transparency-related activities in line with national priorities; Provide relevant tools, training, and assistance for meeting the provisions stipulated in Article 13 of the Agreement and Assist in the improvement of transparency over time. In this context, the objective of the project is to meet the enhanced transparency framework (ETF) requirements under the Paris Agreement and focused on improving the capacity of the country to report to the UN Framework Convention on Climate Change (UNFCC). Project components include Component 1. Strengthening vertical integration in Georgia for transparency-related activities; Component 2. Georgia?s National greenhouse gas (GHG) Inventory system and HFC data management system are aligned to the enhanced transparency framework (ETF) and Component 3. Climate Change Mitigation in Georgia?s transparency system. In September 2015, Georgia has submitted its Intended Nationally Determined Contribution (INDC)[40]⁴⁰ to the UNFCCC. According to the INDC, Georgia plans to unconditionally reduce its GHG emissions by 15% below the Business as Usual scenario (BAU) by 2030, which can be increased up to 25% if the country has access to low-cost financial resources and technology. Georgia will update its INDC in December 2020. With this background, Georgia recognizes that in order to meet these targets, it needs to: strengthen its national and sub-national climate institutions and build the capacity of experts and institutions in the ETF; improve its national greenhouse gas emissions (GHG) inventories; accurately assess and report its mitigation actions to aid tracking of its NDC goals, and moreover, to implement a well-structured domestic measurement, reporting and verification (MRV) framework that includes activities related to finance, technology transfer and capacity-building support received and required. The success of the enhanced transparency framework depends upon substantial progress inside the country, especially concerning: a change in governance structures in order to support decision-making on a permanent basis; involvement of different stakeholders on transparency matters; continuous improvement in measuring and reporting methodologies; regular updates on new data and management of information flows. These challenges

call for synergy between two levels of governance: the central government with the role of defining national development strategies as well as NDC implementation pathways; and the municipalities and cities of Georgia. An integrated and coordinated response at the local and national levels towards sustainable development should address environmental degradation issues while promoting GHG emission reductions.

? **Mayors for Economic Growth (M4EG).** M4EG is a new initiative of the European Union, which was set in operation in January 2017 within the Eastern Partnership framework. The M4EG Secretariat is the main executive body in charge of the Initiative implementation in the region. Overall goal is to support Mayors and municipalities of the Eastern Partnership 6 countries (*incl. Georgia*) to become active facilitators for economic growth and job creation at the local level. Mayors for Economic Growth has an ambition to grow into an extensive professional community across the region, which will require certain commitments from its members, but which offers solid expert and peer-to-peer support, assistance in broadly sharing successes, as well as other significant economic, political and reputational gains.

? The Government of Georgia has prioritized combatting land degradation and improving land management systems by moving forward with a number of baseline activities, including its accession and implementation of relevant international agreements and adoption of related policies and laws, including the NEAP, INDC, NBSAP, NAP of UNCCD, TNC, BUR of UNFCCC, a new agricultural strategy and a new national forest policy. The government of Georgia has gradually increased state funding for sustainable land management. The budget allocation for the Ministry of Environmental Protection and Agriculture of Georgia (MEPA) for programs related to sustainable land and agriculture management was around US\$ 50,000 in 2018.

? The European Neighborhood Programme for Agriculture and Rural Development (ENPARD) was launched in Georgia in 2013 with the goal of reinvigorating the agricultural and rural sectors in the country by supporting the Government?s Agriculture Sector Strategy, strengthening small farmers? organizations, and enabling sustainable rural development. ENPARD is composed of a variety of aid modalities, from direct budget support to the Government to technical assistance and small grants to NGOs. The total budget for ENPARD in Georgia, covering the period of III Phase - 2018-2022 is ? 77.5 million (US\$ 91.5 million).

3) The proposed alternative scenario, GEF focal area[41]⁴¹ strategies, with a brief description of expected outcomes and components of the project

? The project is aimed at delivering global climate change and land degradation benefits by facilitating a transformative shift towards integrated sustainable urban development in Kutaisi, the second-largest city in Georgia. It will do so through three inter-related components. Component 1 will strengthen planning and institutional framework for integrated sustainable urban development; Component 2 will demonstrate the feasibility and facilitate investment in low emission electric public transport, and sustainable land management solutions; and Component 3 will develop capacities and create awareness among municipal stakeholders, the private sector and urban residents about low carbon urban development.

Component 1. Strengthening planning and institutional frameworks enabling sustainable development in the City of Kutaisi

? The first component will support Kutaisi City authorities and relevant national agencies to prepare and adopt applicable spatial and urban development planning documents to establish legal planning basis to foster low emission development, low-carbon electric public transport and sustainable land management within and around Kutaisi in line with the newly adopted Spatial Planning, Architectural and Building Code (2018) and Rules for Development of Spatial and Urban Plans (2019), relevant provisions of the national climate and land degradation strategies, as well as priorities as described in the baseline section.

? Main outcome (*Outcome 1.1*) of this component is to put in place integrated nature based urban development planning and institutional frameworks to foster low emission development (low-carbon electric public transport) and sustainable land management in and around Kutaisi. Under this outcome support will be provided to develop integrated land-use plan (*and/or other applicable spatial or urban development plan*) based on integrated approach to promote and secure long-term CCM and SLM benefits. As described in baseline scenario (*2.1 Urban and spatial planning framework*) Kutaisi City intends to collect the initial data and define the methodology, and technical approach for the City spatial plan (City Master Plan). According to the Rules for Development of Spatial and Urban Plans (2019), the City Master Plan should be based on Integrated Land-use Plan (*as an integral part of Master Plan*), which, in turn, should cover aspects related to low emission development (low-carbon electric public transport) and sustainable land management as well.

? The outcome of this component will be achieved in close cooperation with climate change, land management and energy efficiency related central line ministries (Ministry of Environmental Protection and Agriculture -MEPA, Ministry of Economy and Sustainable Development -MESD, Ministry of Regional Development and Infrastructure - MRDI) and local stakeholders (Local NGOs and CSOs and private sector).

? Integrated land-use plan for Kutaisi will provide city administration with a solid policy platform to develop and implement sustainable urban management strategies integrating low carbon public transportation with Land Use Planning. Integrated land-use plan in the broader context will supersede all pre-existing planning guidance and present an opportunity to develop an integrated approach to planning that shows how land use and transportation planning carried out together could save more energy than conventional designs and could produce better outcomes than separate single purpose plans. Regarding the latter, land degradation hot spots, trends and drivers will be mapped improve efficiency, reduce duplication of effort and allow for connected, collective action. To do so, the landuse plan will take into account the influence of transport on various aspects of land use. The spatial impacts of transportation serve as the main catalyst in urban form, development and its associated problems. These impacts represent severe consequences of a built and environmental development perspective. The Plan will be prepared with a view of identifying integrated land use and low-carbon solutions which could acknowledge the interaction of transportation, cropland and rangeland. Significant amount of nutrients, water and carbon are carried from urban to rural areas. An integrated approach will simultaneously reduce the need to travel/length of journeys, while at the same time promoting sustainable land management practices by conserving high value land and counterbalance the negative effects on soil fertility and productivity considering the land degradation map as one of the design criteria in transportation planning. In addition, the Plan will include measures to prevent future forest/ land degradation and secure provision of ecosystem services.

? This component will also support measures to review and improve municipal institutional framework for spatial and urban development planning, transport, including cycling strategy with networking map, public transport master planning through the promotion of low carbon bus fleet design and land management to ensure that all relevant stakeholders and authorities are consulted and aware about the planning process.

? Capacity development and technical support will be provided for policy engagement, partnership formation and coordination mechanisms in a gender-sensitive manner. In this regard, Gender and Development (GAD) provisions will be an integral part of the project strategy, taking into consideration gender policies of the GEF, UNFCCC, UNEP as well as those of the Government of Georgia (*e.g., Gender Equality Act of 2010*[42]⁴²).

? As one of the pilot demonstrations of the Project, the project will identify options to better connect Sataplia Nature Reserve with Kutaisi. The objective will be to connect this nature reserve with the city; so that more people will have chance to visit the park and appreciate the role of nature. This will also help the city management to mainstream sustainable management of land and biodiversity into urban planning.

Component 2. Facilitating investment in low emission electric public transportation and green city development

? The main objective of this component (Outcome 2.1) is to support low emission development and LDN through demonstration of economic and technical feasibility of integrated municipal pilot projects. This component will support the identification and demonstration of financial and technical feasibility of low emission electric urban transport solution and SLM solutions.

? This outcome will be implemented in participatory planning manner with the engagement of central line ministries and agencies (Ministry of Environmental Protection and Agriculture - MEPA, Ministry of Economy and Sustainable Development -MESD, Ministry of Regional Development and Infrastructure ? MRDI, National Forest Agency ? NFA, Protected Areas Agency ? APA, Georgian National Tourism Administration ? GNTA, Municipal Development Fund of Georgia ? MDF, National Center for Disease Control and Public Health ? NCDC, Ministry of Finance - MoF) and local stakeholders (Local NGOs and CSOs and private sector).

? Capital investments for technology demonstrations (Output 2.1.4[43]⁴³) will be executed jointly by the Kutaisi City administration and the Ministry of Environmental Protection and Agriculture (MEPA) in collaboration with the Ministry of Economy and Sustainable Development (MESD), Ministry of Regional Development and Infrastructure (MRDI), Municipal Development Fund of Georgia (MDF) and the Ministry of Finance (MoF).

2.1.1 (Low emission electric urban transportation and green city development needs assessed, and resource mobilization strategy/plan elaborated by Kutaisi municipality)

2.1.2 (Economic and financial analysis and design of low emission electric public transportation solutions from Kutaisi City to Sataplia Nature Reserve identified, investment needs assessed and disseminated to policymakers)

2.1.3 (A GCF concept note to scale up low-carbon transport in Kutaisi is developed based on the feasibility studies and analysis)

2.1.4 (At least 2 demonstration projects implemented: (increased share of urban trips performed by ebusses, cycling and walking to sustainably managed Sataplia Nature Reserve): 1 integrated low emission electric urban transport (connecting Kutaisi city center to Sataplia Nature Reserve) and 1 SLM demonstration (land and forest restoration), effectiveness and results of the demonstrations documented and disseminated to key decision makers)

? As part of this component financial needs assessment for achieving low emission urban transportation and green city development, which will incorporate SLM solution, will be undertaken and resource mobilization strategy/plan will be prepared. Based on the resource mobilization strategy, a GCF concept note to scale up low-carbon transport in Kutaisi will be developed. The priority and the content of the Proposed GCF concept will be identified based on the results of the output ?1.1.2. Low emission development strategy for Kutaisi city?. The resource mobilization strategy will also facilitate and leverage investment for their wide-scale application from the central budget and IFIs, such as EBRD programmes[44]⁴⁴. Such integrated solutions will feature, for example, design and implementation of low emission electric urban transport corridor to/from Sataplia Nature Reserve which would include a combination of measures to optimize and eventually improve public access to the nature reserve for recreational purposes by reducing trip lengths and facilitating the use of transit, biking, and walking from/to and within forest zone.

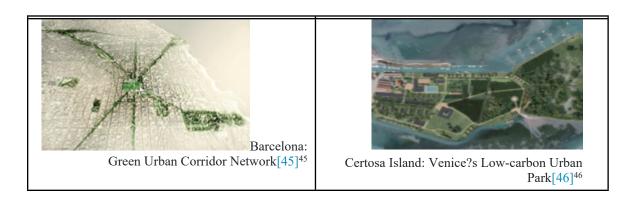
? This low emission electric urban transportation pilot initiative has the potential to provide longterm strategic benefit to Kutaisi. This pilot will provide an opportunity for public and private operators to assess the viability of electric buses in routes around Kutaisi and in Georgia more generally. The round-trip from/to Kutaisi City Center and Sataplia Nature Reserve is about 20 km. The pilot will include two li-on battery-operated buses and a fast charger at the end stop complemented with low power overnight chargers at the main bus-park (which seems the most economical charging combination). The total estimated cost will be around US\$950,000 inclusive of the capital cost of the vehicle body, battery, fast charging station, low-power charging station, feasibility studies. The number of buses will be decided during the PPG phase. The GEF grant will cover about 15% of the capital cost; the rest will be covered from the co-finance.

? This will be complemented by appropriate SLM measures along with the corridor as well as in the forest zone, e.g. rehabilitation of degraded urban forest land, creation of green zones on existing

degraded land owned by the City along transport corridor in order to make proposed low-carbon transport alternatives more attractive and sustainable.

? Figure 4: International best practices of integrated low-carbon and SLM solutions for the cities

?



Component 3. Capacity development, knowledge management and M&E for integrated low carbon city development

? Objective (Outcome 3.1) of Component 3 is that the City of Kutaisi demonstrates improved capacities for low-carbon electric public transport and sustainable land management. The component will focus on capacity building, knowledge sharing and dissemination. It will start with capacity needs assessment and preparation of capacity building plan for the city administration. A huge number of tools exist to help cities think through a range of issues from low emission development. The project will work with the city administration and other partners (MEPA, MESD, MRDI) to identify a number of tools that will be included as part of the various workshops and training. Additionally, the city administration needs to possess the necessary knowledge and skills with which they can select relevant urban planning and management strategies appropriate to the structure and composition of the urban land resources and then implement the corresponding actions-

? The series of capacity building activities will be implemented for at least 200 key actors (municipal decision-makers and municipal personnel, independent experts, representatives of civil

society organizations /CSOs/) e.g., in the fields of sustainable urban planning and management, low emission electric transport and sustainable land management. Required training materials and modules will, inter alia, draw from the best practices and lessons learned of the components 1, 2 and 3.

? A web-based knowledge management system (in the form of functional platform) will be developed for information sharing, awareness raising, dissemination and replication purposes. Web-based knowledge management system will connect cities with resources in existing tools, such as the online Climate Smart Planning Platform, which provides a central database of more than 320 tools and datasets from 58 organizations, including user reviews. Currently, stakeholders at municipal and national levels are having difficulties in reaching the relevant information in terms of best practices, projects, laws, theoretical knowledge, training, organizations, etc. An interactive web-based platform will allow them to access these essential resources and help in developing networks and exchange of information.

? The series of public events uniting the public and private sector to ministers, the mayor and young professionals will be organized to further promote/discuss the obstacles and opportunities of low carbon electric urban transport, and sustainable land management.

? The possibility to add content and share experiences online for the registered users will increase the sense of ownership of the platform. The architecture and design of the web platform will be interactive, functional, efficient and user-friendly. It will allow easy consultation of resources (databases and directories) and also allow networking between stakeholders. It will be designed in such a way that it can be easily expanded to meet future needs. The platform will be created by a professional web developer in close consultation with the Kutaisi City. This web-based tool will also serve as a communication and exchange gateway for nature conservation, ecological living and sustainable development-oriented CSOs, general public and other stakeholders. A web-based knowledge management system will be the primary recommended database for best practices on ?Green city development concept?, including the topics related to the sustainable urban planning and management, sustainable urban transport and sustainable land management. This system will facilitate the exchange of knowledge on this topic with stakeholders in Georgia and worldwide ? from land users to decision-makers ? with the aim to improve land management.

4) Alignment with GEF focal areas

The project?s intervention strategy is in compliance with the GEF?s Focal Area Strategies for climate change mitigation, CCM-1-2, promoting innovation and technology transfer for sustainable energy

breakthroughs for electric drive technologies and electric mobility. At the same time, the proposed project is in line with LD-1-4, in reducing pressures on natural resources from competing for land uses and increasing resilience in the wider landscape.

The GEF-7 programming aims at further advancing the GEF2020 vision that pursues greater impact per unit of investment by tackling the drivers of environmental degradation, promoting greater sectoral and thematic integration, and contributing to systems change in key areas that impact the GEF mission. The GEF-7 Programming Directions is seeking maximum impact across its focal areas through integrated programming.

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

? Kutaisi City has been selected because it has significant GHG emissions in the transport sector which will continue to grow. The issue of sustainable transport is particularly important because Kutaisi is a second largest in Georgia by land area of about 70 km2 and until recently by population of over 196 thousand.[47]⁴⁷ However, in case of absence of this project and consequent GEF support, Kutaisi will not be able to implement green urban, low emission and sustainable land use planning and development in integrated and participatory manner. The reason for this is lack of experience, expertise and capacities at municipal level.

? In the baseline situation, there will still be an absence of more prescriptive guidance, policies for integrated green urban development and a lack of awareness and knowledge and awareness of benefits of integrated green development in Kutaisi. Green urban development is a crucial issue for Georgia. Despite the fact that the City of Kutaisi approved its

? The City government has yet to develop a consistent policy on sustainable transport, which should integrate land use, urban planning, traffic management, and intelligent low emission transport systems into one comprehensive plan. Without external intervention, promotion of non-motorized forms of transport will not be developed in an environmentally sustainable manner in Kutaisi.

? Over 57 per cent of Georgia?s population[48]⁴⁸ lives in cities. Most of the traffic is concentrated in urban areas. Urban transport in Kutaisi will continue to grow and be the major energy consumer, driven by the rapid increase in the number of private vehicles, at the expense of less carbon-intensive public transport. The quality of public transport and related services in Kutaisi will be inadequate. Private vehicle owners will not have awareness and real incentives to travel efficiently. Most owners will tend to choose less efficient but cheaper second-hand cars while relatively rich owners will prefer more powerful cars.

? The local government has yet to develop a consistent policy on sustainable transport, which should integrate land use, urban planning, traffic management, and intelligent transport systems. Currently, efforts are seldom made to link urban, land-use and transport planning policies. The administration of Kutaisi has generally focused its efforts on providing more space and roadways for use by private vehicles, rather than developing public transport or providing incentives to individuals to cut back on fuel consumption and use more efficient vehicles. Transport infrastructure development and construction of new roads have been the main priority for public expenditure. Kutaisi City will not consider assessing the benefits of ecosystem services of the urban and peri-urban landscape. The baseline scenario does not have any land degradation related initiatives in Kutaisi; therefore, the city?s contribution to Georgia?s land degradation neutrality strategy will be limited.

? This project has been designed as a package of technical and institutional capacity building measures at city level leading to policies to improve service quality for public transport and in order to develop integrated land-use/transport plans for the city of Kutaisi. In parallel with the technical assistance package, there will be some limited funding available for specifically targeted investments under component 2. The proposed activities of the project to be supported by the GEF are activities that would unlikely occur otherwise under a business as usual scenario. The project is intended to develop plans and policies which will lead to new investment decisions which entail significantly improvement of the transport management infrastructure in Kutaisi. Broad involvement of stakeholders in consultations as part of the project means that the project will involve civil society organizations and allow for a participatory approach to the solution of the problems related to the sustainable management of transport. The project will enable Georgia to mainstream environmental issues into its transport management infrastructure and assist the country in meeting its commitments to UNFCCC through the reduction of GHG emissions due to the fact that the project is expected to lead to the increased use of sustainable transport modes. The SLM component will provide best practices on how land degradation challenges could be addressed at the city scale. The project will support Georgia?s national efforts for achieving land degradation neutrality target. Currently, there are little incentives to upgrade vehicle fleets and a large number of old cars still could be found on the roads in Kutaisi. GEF?s involvement in the implementation of the planned actions will ensure sustainable urban development policies are implemented at the local scale.

? About \$10.9 million of co-financing is expected from the City of Kutaisi, including co-financing for the sustainable transport planning for Kutaisi and for investment activities related to the implementation of low emission transport projects under components 2. Ministry of Environmental Protection and Agriculture of Georgia (MEPA) will provide \$250,000 in-kind contribution towards awareness-raising activities, seminars, and workshops in other parts of Georgia to promote sustainable transport. REC Caucasus will contribute by \$1.4 million in the form of both in-kind and grant and UNEP by \$0.15 million. Additional possibilities for co-financing from EBRD and other IFIs will be explored during the PPG phase.

6) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

? Global Environmental Benefits associated with this project are estimated around 10,000 tCO2/year directly and indirectly or about 200,000 tCO2e over the lifetime of proposed measures (20 years). These estimates prepared in 2020 are based on the methodology applied on projections for emissions up to 2030. The estimated annual GHG emission reduction estimates are provided below.

Description of low-carbon transport measure	Annual GHG emission reduction (tCO2e/year)
Improving public transport services	1,600
Fast public transport service activities	2,450
Walking and Cycling Routes	600
Parking policy	350

? Consequential emission reductions are expected to be larger: updated estimations (Figure 2) show that implementation of all proposed low-carbon transport activities in the city of Kutaisi will lead to reduction of GHG emission by 2030 below the BAU for 2020.

? The project will contribute to achieving the LDN national targets in Georgia through development of sustainable land-use plan for Kutaisi and demonstration of land restoration/SLM

practices over the total area of forests (700 ha) within the territory of Kutaisi City. This will result in provision of more ecosystem services and consequently, improvements in wellbeing and creates linkages to multiple SDGs by designing interventions that generate multiple environmental, economic and social benefits while minimising trade-offs and maximising synergies and taking into account the different needs and priorities of women and men.

7) Innovation, sustainability and potential for scaling up

? <u>Innovativeness:</u> The innovativeness of this project relates to the fact that this project is the first project in Georgia which at city level aims at integrating concept of sustainable green city with sustainable transport and sustainable land management practices and designing overall Integrated Green City Development Strategy for the City of Kutaisi. There is no other ongoing or planned initiative/ project in Georgia, which has such an innovative approach or which focuses on the sub-national level.

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? <u>Sustainability:</u> The project is based on the commitment of the city to reduce GHG emissions by 23% by 2030 initiative in Kutaisi, in particular, the Action Plan of Kutaisi under the agreement signed between Kutaisi City and European Commission, as part of Covenant of Mayors (CoM), which was approved by the City Administration. Therefore, there is a high level of political support for the project, which is important for the sustainability of the results. Successful completion of the project will demonstrate the full process of implementing a green city development project and the GHG reduction and environmental benefits of lower carbon intensity urban transport in Georgia. The project outputs include strategic documents and bankable projects which will play a crucial role to accelerate full scale implementation of the green urban development concept. Furthermore, improved awareness raising and capacity building efforts of the benefits of sustainable urban transportation in Kutaisi will increase demand for less carbon intensive modes of urban transport amongst local residents and tourists.

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? <u>Scaling Up:</u> The other municipalities of Imereti region (the region of Kutaisi) including Chiatura, Tkibuli, Tskaltubo, Baghdati, Vani, Zestafoni, Terjola, Samtredia, Sachkhere, Kharagauli and Khoni are also seeking to implement a green urban development plan as well as undertaking sustainable transport measures. Therefore, there is already a demand for scaling up. The project will ensure inclusion of the stakeholders of these municipalities in the capacity development and knowledge management activities.

[1] Emissions Distribution in Kutaisi City according to Sectors in 2012 and 2020 // Fig. 5 of Sustainable Energy Action Plan (SEAP) of Kutaisi City for 2015- 2020 / Approved by the City Council

of Kutaisi on 26 November, 2014, Ordinance No.90 / Developed within Enhancing Capacity for low Emission Development Strategies (EC-LEDS) and supported by Clean Energy Program, USAID - COP Winrock International - Georgia EC-LEDS Program, 2014.

https://mycovenant.eumayors.eu/docs/seap/15784 1419252832.pdf

[2] **Transport and Road Infrastructure in Kutaisi City** // Chapter 4 of Sustainable Energy Action Plan (SEAP) of Kutaisi City for 2015- 2020 / Approved by the City Council of Kutaisi on 26 November, 2014, Ordinance No.90 / Developed within Enhancing Capacity for low Emission Development Strategies (EC-LEDS) and supported by Clean Energy Program, USAID - COP Winrock International - Georgia EC-LEDS Program, 2014.

https://mycovenant.eumayors.eu/docs/seap/15784_1419252832.pdf

[3] Quantifying greenhouse gas emission of asphalt pavement preservation at construction and use stages using life-cycle assessment / by Hao Wang, Israa Al-Saadi, Pan Lu, Abbas Jasim / Rutgers Sustainable University // International Journal of Transportation, 2019: 1. https://doi.org/10.1080/15568318.2018.1519086 // Life-cycle cost analysis (LCCA) and environmental life-cycle assessment (LCA) for highway pavement selection / by Rui Liu, Brooke W. Smartz, Barry Descheneaux / International Journal of Sustainable Engineering, Volume 8, 2015 - Issue 2 / Pages 102-110. https://doi.org/10.1080/19397038.2014.958602 // Measuring the carbon footprint of road construction using Calculator for Harmonised Assessment and Normalisation of Greenhouse-gas Emissions for Roads (CHANGER) / by Yue Huang, Bachar Hakim, Susanna Zammataro // International Journal of Pavement Engineering, Volume 14, 2013 ? Issue 6 / Pages 590-600. https://doi.org/10.1080/10298436.2012.693180

[4] EAPA (European Asphalt Pavement Association), EUPAVE (European Concrete Paving Association) and FEHRL (Forum of European National Highway Research Laboratories): Position Paper ?Road Pavement industries highlight huge CO2 savings offered by maintaining and upgrading roads?. 2017.

https://www.eupave.eu/wp-content/uploads/eupave-eapa-fehrl-co2-savings-by-maintaining-and-upgrading-roads.pdf

http://www.fehrl.org/news/fehrl-eupave-eapa-publication-on-co2-savings-by-maintaining-and-upgrading-roads

[5] For comparison: as of January 1, 2020, population of Tbilisi equaled to 1,184,818 formally registered resident civilians (not including internal and foreign migrants and temporary (seasonal) work force from around the country and neighboring countries).

[6] GeoStat (2020). **Population of Georgia by regions and self-governed units (incl. self-governed cities)** / National Statistics Office of Georgia ? GeoStat, Tbilisi, 2020. *https://www.geostat.ge/en/modules/categories/41/population*

[7] GeoStat (2019). **Women and Men in Georgia** / Statistical Publication / National Statistics Office of Georgia ? GeoStat, Tbilisi, 2019. *https://www.geostat.ge/en/single-archive/3332*

[8] City of Kutaisi (2012). Sustainable Tourism Development Strategy and Action Plan for Kutaisi: An integrated approach for the sustainability of the tourism production. *http://kutaisi.gov.ge/files/upload-file/pdf/kutaisi-strategy-action-plan.pdf*

[9] According to the National Statistics Office of Georgia (GeoStat), the population of the city was 232.2 thousand people in 1994 (4.71% of the population of Georgia). As a result of economic migration, the population of Kutaisi in 2020 has decreased by 41.8% compared with 1994. About 97,000 civilians have emigrated from Kutaisi to other regions (including crossing international borders) since 1994 ? mainly because the job opportunities in the migrants own city were insufficient.

https://www.geostat.ge/en/modules/categories/41/population

[10] Kutaisi City Local Economic Development Plan (LEDP) for 2019-2020 - "Old City with New Opportunities" // Endorsed by Ordinance of Kutaisi City Council (?*Sakrebulo*?) No.168 of 24 April, 2019 (*Official Web-Page of Kutaisi City: kutaisi.gov.ge, Official Publication 24.04.2019*) - [*Unofficial Translation in English*] http://kutaisi.gov.ge/sites/default/files/ledp_kuraisi-_eng.pdf

[11] Mayors for Economic Growth (M4EG) is a new initiative of the European Union, which was set in operation in January 2017 within the Eastern Partnership framework. The M4EG Secretariat is the main executive body in charge of the Initiative implementation in the region. Overall goal is to support Mayors and municipalities of the Eastern Partnership countries (*Armenia, Azerbaijan, Belorus, Georgia, Moldova and Ukraine*) to become active facilitators for economic growth and job creation at the local level. Mayors for Economic Growth has an ambition to grow into an extensive professional community across the region, which will require certain commitments from its members, but which offers solid expert and peer-to-peer support, assistance in broadly sharing successes, as well as other significant economic, political and reputational gains. https://www.m4eg.eu/en/

[12] International Council of Airports (ACI Europe) reports.

[13] National Association of Local Authorities of Georgia - NALAG (2016). Adaptation and mitigation strategy paper at local level ? Case of Kutaisi. Available in Georgian. *http://nala.ge/uploads/kutaisi.pdf*

[14] Georgia?s Second Biennial Update Report Under the United Nations Framework Convention on Climate Change (2019) / Ministry of Environmental Protection and Agriculture of Georgia.

https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/03268145_Georgia-BUR2-1-2019.06.13_BUR2_2019_Eng.pdf

[15] Second National Action Programme (NAP) to Combat Desertification (2014-2020).

[16] http://nala.ge/uploads/kutaisi.pdf

[17] Sustainable Energy Action Plan (SEAP) of Kutaisi City for 2015- 2020 / Approved by the City Council of Kutaisi on 26 November, 2014, Ordinance No.90 / Developed within Enhancing Capacity for low Emission Development Strategies (EC-LEDS) and supported by Clean Energy Program, USAID - COP Winrock International - Georgia EC-LEDS Program, 2014.

https://mycovenant.eumayors.eu/docs/seap/15784_1419252832.pdf

[18] http://www.ebrd.com/work-with-us/projects/psd/green-cities-georgia.html

[19] EBRD (2016). Green City Action Plan Methodology. https://www.ebrdgreencities.com/assets/Uploads/PDF/6f71292055/Green-City-Action-Plan-Methodology.pdf

[20] Abuladze M. (2013). Architectural-Planning Development of the City of Kutaisi and its Future Prospects / Thesis for the fulfilment of the PhD / Technical University of Georgia, Faculty of Architecture and Urbanist Sciences. Tbilisi, Georgia. 2013 ? 151 p. // Depository: National Library of the Parliament of Georgia [*Georgian version*]. http://www.nplg.gov.ge/dlibrary/collect/0002/000703/Dis%20-%207.21.2013.pdf

[21] Compare with latest available data from the National Statistics Office of Georgia (GeoStat) where population of the City was estimated to be 135,200 as of January 1, 2020 // Source: *GeoStat (2020)*. *Population of Georgia by regions and self-governed units (incl. self-governed cities)* / National Statistics Office of Georgia ? GeoStat, Tbilisi, 2020. *https://www.geostat.ge/en/modules/categories/41/population*

[22] Spatial Planning, Architectural and Building Code of Georgia (2018) // Law of Georgia ? Spatial Planning, Architectural and Building Code? of 20 July, 2018 (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Ref.: 3213-rs, Registration Code No. 330090000.05.001.019104/ Consolidated Version as of 22.05.2020 as modified by 5 amending Laws*) - [*Official Version in Georgian*] https://matsne.gov.ge/document/view/4276845

[23] Rules for Development of Spatial and Urban Plans (2019) / Approved by the Decree of the Government of Georgia No.260 of June 3, 2019 ?On Rules for Development of Spatial and Urban Plans (Legislative Herald of Georgia - LHG Official Website, 04/06/2019) [Georgian Version] https://matsne.gov.ge/ka/document/view/4579368?publication=0

[24] Kutaisi City Development Strategy ? ?Kutaisi-2021? // Approved by Decree of Kutaisi CityCouncil (?Sakrebulo?) No.145 of 31 August, 2016 (Official Gazette of Georgia ? Legislative Herald ofGeorgia (LHG), web-page: matsne.gov.ge, Registration Code No.300020000.35.123.016355, OfficialPublication02.09.2016)-[Official Version in Georgia]https://matsne.gov.ge/en/document/view/3384714

[25] Kutaisi City Annual Budget for 2020 // Approved by Decree of Kutaisi City Council (*?Sakrebulo?*) No.133 of December 25, 2019 (Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Registration Code 190020020.35.123.016536, Official Publication 30.12.2019 / Amended by Decrees No.135 of 29.01.2020, No.139 of 26.02.2020 and No.143 of 14.05.2020) ? [Official Georgian Version]

https://matsne.gov.ge/ka/document/view/4740212

[26] Budgetary Program 07-02: Development of City Master Plan (*Article 13(6b): Primary data gathering/analyses and preparation of Terms of Reference for elaboration of Kutaisi City Master Plan and Housing Development Regulatory Plan*).

[27] Georgia?s Second Biennial Update Report under the UNFCCC (2019). Ministry of Environmental Protection and Agriculture of Georgia.

https://www4.unfccc.int/sites/SubmissionsStaging/NationalReports/Documents/03268145_Georgia-BUR2-1-2019.06.13_BUR2_2019_Eng.pdf

[28] Draft National Sustainable Energy Action Plan of Georgia for 2018-2030 (2017). Ministry of

Economy and Sustainable Development of Georgia with technical support of the European Bank for

Reconstruction and Development (EBRD).

https://www.unece.org/fileadmin/DAM/project-

monitoring/unda/16_17X/E2_A2.3/NSEAP_Georgia.pdf

[29] Georgia?s Intended Nationally Determined Contribution to the UNFCCC (2015).

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Georgia%20First/INDC_of_Georgia.pd f

[30] Kutaisi City Development Strategy ? ?Kutaisi-2021? // Approved by Decree of Kutaisi City Council (?Sakrebulo?) No.145 of 31 August, 2016 (Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Registration Code No.300020000.35.123.016355, Official Publication 02.09.2016) - [Official Version in Georgian] https://matsne.gov.ge/en/document/view/3384714

[31] Kutaisi City Updated Plan on Parking Places for Common and Special Use (2019) // Approved by Decree of Kutaisi City Council (?Sakrebulo?) No.80 of 25 February, 2015 ?On Determining Parking Places for Common and Special Use within the Territory of the Kutaisi City? (Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Registration Code No. 010250020.35.123.016290, Official Publication 26.02.2015 / Amended by Decrees No.121 of 30.12.2015, No.54 of 25.04.2018, No.78 of 30.01.2019 and No.93 of 27.02.2019) - [Official Version in Georgia] https://matsne.gov.ge/ka/document/view/2739660

[32] As of 2014 (Source ? Kutaisi SEAP). https://mycovenant.eumayors.eu/docs/seap/15784 1419252832.pdf

[33] The Energy Community is an international organisation which brings together the European Union and its neighbours to create an integrated pan-European energy market. The organisation was founded

by the Treaty establishing the Energy Community signed in October 2005 in Athens, Greece, in force since July 2006. The key objective of the Energy Community is to extend the EU internal energy market rules and principles to countries in South East Europe, the Black Sea region and beyond on the basis of a legally binding framework. https://www.energy-community.org

[34] Energy Efficiency Act of Georgia (2020) // Law of Georgia on Energy Efficiency of 21 May, 2020 (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Ref.:* 5898-ss, *Registration Code No. 300280020.05.001.019857*) - [Official Version in Georgian] https://matsne.gov.ge/en/document/view/4873938

[35] Energy Labelling Act of Georgia (2019) // Law of Georgia on Energy Labelling of 20 December, 2019 (Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Ref.: 5688-rs, Registration Code No. 300350000.05.001.019726) - [Official Version in Georgian] https://matsne.gov.ge/en/document/view/4745123

[36] Energy Performance of Buildings Act of Georgia (2020) // Law of Georgia on Energy Performance of Buildings of 21 May, 2020 (Official Gazette of Georgia ? Legislative Herald of Georgia (LHG),web-page: matsne.gov.ge, Ref.: 5900-ss. Registration Code No. 300280020.05.001.019858) Version *Georgian*] [Official in https://matsne.gov.ge/en/document/view/4873932

[37] http://www.ebrd.com/work-with-us/projects/psd/green-cities-georgia.html

[38] https://www.ebrd.com/work-with-us/projects/psd/50842.html

[39] Capacity Building Initiative For Transparency (CBIT). *https://www.thegef.org/topics/capacity-building-initiative-transparency-cbit*

[40] Georgia?s Intended Nationally Determined Contribution (INDC) Submission to the UNFCCC (2015).

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Georgia%20First/INDC_of_Georgia.pd f

[41] For biodiversity projects, in addition to explaining the project?s consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving.

[42] Gender Equality Act (2010) // Law of Georgia on Gender Equality of 26 March, 2010 (Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Ref.: 2844-Is, Registration Code No. 010.100.000.05.001.003.962/ Consolidated Version as of 19.02.2019 as modified by 8 amending Laws) - [Unofficial Translation in English] https://matsne.gov.ge/en/document/view/91624

[43] Output 2.1.4. At least 2 demonstration projects implemented: (increased share of urban trips performed by e-busses, cycling and walking to sustainably managed Sataplia Nature Reserve): 1 integrated low emission electric urban transport (connecting Kutaisi city center to Sataplia Nature

Reserve) and 1 SLM demonstration (land and forest restoration), effectiveness and results of the demonstrations documented and disseminated to key decision makers.

[44] EBRD recently approved a program on Georgia Urban Transport Enhancement Programme on 2 September 2020. The goal of the Project is to establish regular bus services in each Project City (Kutaisi, Gori, Telavi, Zugdidi, Rustavi and Poti), through the capacity enhancement of the existing transport companies and the establishment of new transport companies, where needed.

[45] https://www.citylab.com/solutions/2017/05/barcelona-green-urban-forest-climate-plan/526998/

[46] http://nws.eurocities.eu/MediaShell/media/Venice%20Certosa%20Island.pdf

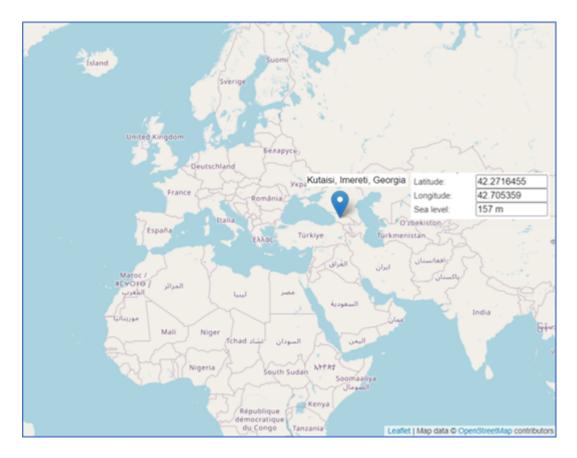
[47] National Statistics Office of Georgia - Geostat (2017) / STATISTICAL YEARBOOK OF GEORGIA - 2016 / Table 2.17 - Number of Population of Cities and Urban Type Settlements. http://www.geostat.ge/cms/site_images/_files/yearbook/Yearbook_2016.pdf

[48] National Statistics Office of Georgia - Geostat (2017) / Population for the Beginning of the Years: 2007-2016. http://www.geostat.ge/index.php?action=page&p_id=152&lang=eng

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

Figure 5. Map where project interventions will take place ? Location and coordinates of Kutaisi City



For more details on programme/project map and geographic coordinates please also see Annex A.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Indigenous Peoples and Local Communities

Civil Society Organizations Yes

Private Sector Entities Yes

If none of the above, please explain why:

In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement

In 2018 and 2019, during the project identification phase, 12 working meetings with 60 peoples were arranged with local civil society organizations, private sector entities and representatives of the local

population (communities) which actively participated in consultation process along with Kutaisi City local authorities, Ministry of Environmental Protection and Agriculture of Georgia (MEPA), other line ministries and their subordinated units and agencies.

Due to the fact that the population of the project area does not include indigenous or ethnic minority peoples, the latest categories of stakeholders were not covered by the consultation process.

Stakeholder engagement will be a process in which the project will build and maintain constructive and sustainable relationships with stakeholders impacted the life of a project. This will be part of a broader stakeholder engagement strategy, which also will encompass central and local governments, civil society and others with interest in the project.

The satisfaction of stakeholders with the project and/or its benefits will be considered an important aspect of the success of the project and the project stakeholder management will be therefore a core activity of PPG and implementation phases to gain project success.

For the above purpose, detailed Stakeholder Engagement Plan will be elaborated at PPG stage which will assist the project with effectively engaging with stakeholders throughout the life of the main and specific activities that will be implemented to manage or enhance engagement.

The Stakeholder Engagement Plan will define technically appropriate approach to consultation and disclosure. The goal of this plan will be to improve and facilitate decision making and create an environment that promotes active involvement of stakeholders.

Information about the future roles of stakeholders and proposed means of future engagement, as well as how the project will keep engaging stakeholders through adequate means are identified in Table 3 below:

Table 3: Role of the key stakeholders proposed means of future engagement

Key stakeholders	Anticipated role in the project
Ministry of Environmental Protection and Agriculture (MEPA) Environment and Climate Change Department (ECCD)	Ministry of Environmental Protection and Agriculture (MEPA) is the UNFCCC and UNCCD Focal Point, coordinator of the Covenant of Mayors? (CoM) initiative and is responsible for defining and elaborating directions and policies on environmental protection and the sustainable use of natural resources.
(ECCD) Hydromelioration and Land Management Department (HLMD)	Two key functional departments of the MEPA - Environment and Climate Change Department (ECCD) and Hydromelioration and Land Management Department (HLMD) will be directly engaged in project implementation and management through coordination and consultation mechanisms described in Section 6 on Coordination.
	Namely, within ECCD, the Climate Change Unit is responsible for coordination, managing and monitoring of policies and activities for the purposes of fulfilment of the UNFCCC convention, preparation of legislative proposals to be submitted to the relevant parliamentary committees and line ministries, monitoring of planned activities? implementation and reporting to the UNFCCC secretariat. Within ECCD, the Sustainable Development Unit works to promote the implementation of green economy principles along with SDGs.
	Land Resources Protection Unit under the HLMD is responsible for the development and implementation of policies on sustainable management and targeted use of land resources, for action plans to mitigate desertification and land degradation processes. A representative of ECCD/MEPA will lead the Project Steering Committee.
	MEPA, through the Environment and Climate Change Department (ECCD) and Hydromelioration and Land Management Department (HLMD) will play a crucial role in guiding the elaboration of Integrated Green City development framework.
	At the same time Representatives of these and other relevant departments and units of MEPA will be involved in training sessions.
	In addition, MEPA will provide advice and technical assistance in planning and developing project activities to prevent land degradation.

National Forest Agency (NFA)	National Forest Agency (NFA), designated as a central agency for forest management in Georgia, is operating under the umbrella of the Ministry of Environmental Protection and Agriculture (MEPA). NFA will provide advice and technical assistance for planning and implementation of the project activities for forest areas rehabilitation within and outside of Kutaisi City.	
Protected Areas Agency (APA)	 Protected Areas Agency (APA), designated as a central agency for protected areas management in Georgia, is operating under the umbrella of the Ministry of Environmental Protection and Agriculture (MEPA). APA will be directly involved in project implementation through planning activities for development of low emission transport route between Kutaisi City and Sataplia Nature Reserve. 	
Ministry of Economy and Sustainable Development (MESD)Transport and Logistics Development Policy Department (TLDPD)Energy Policy and Investment Projects Department (EPIPD)Energy Reforms and International Relations Department (ERIRD)	 Ministry of Economy and Sustainable Development (MESD) is responsible for the for-energy efficiency in buildings, transport and the issues of green economy. MESD will be involved in the elaboration and scaling up of Integrated Green City development framework. MESD amongst other functions also sets transport development policy for Georgia and through its Transport and Logistics Development Policy Department (TLDPD) takes part in coordinating technical inspection policies for motor vehicles, a mandatory requirement for all motor vehicles since 2018. Since 2018, after merging of the Ministry of Energy with MESD, the MESD has obtained the mandate for oversight of the country's supply and quality of primary fuels. Though MESD is not directly involved in climate change mitigation or efficiency-intransport activities, it is in charge of execution of Georgia?s responsibilities as a member of European Energy Community (EEC) and the terms of implementing the European Energy Acquis within the Georgian legislate framework. Under EEC membership, Georgia needs to introduce fuel quality and fuel efficiency standards. By the involvement in the project formulation at PPG stage, MESD?s key functional departments like <i>Transport and Logistics Development Policy Department (TLDPD)</i> and <i>Energy Reforms and International Relations Department (ERIRD)</i> will help to identify and plan coherent concept and pilot project activities to introduce fuel efficiency standards practices for urban transportation system development. 	

Georgian National Tourism Administration (GNTA)	Georgian National Tourism Administration (GNTA), designated as a central agency for tourism development in Georgia, is operating under the umbrella of the Ministry of Economy and Sustainable Development (MESD). Goals and objectives of the GNTA are formation and implementation of the Georgian tourism development state policy, promotion of the sustainable tourism development, promotion of a high export income growth and job creation in the country on the basis of the tourism development, the attraction of the foreign tourists to Georgia and development of the domestic tourism as well, promotion of human resources development in the field of tourism destinations, infrastructure and tourism. GNTA will be directly engaged in project implementation through involvement in planning activities aimed at elaborating of sustainable tourism and nature-based urban solutions for Kutaisi City.
Ministry of Regional Development and Infrastructure (MRDI) Spatial Planning Department (SPD) Roads Department of Georgia (GeoRoad)	 Ministry of Regional Development and Infrastructure (MRDI) has the mandate for oversight of modification and modernization of the country's road networks as well as coordination and monitoring of spatial planning in Georgia. MRDI also sets transport policy (road network development policy) for Georgia and has a technical agency Roads Department of Georgia (GeoRoad) that is in charge of organizing technical inspections of roadways. Through its involvement in the PPG phase, MRDI will contribute in development of green city concept and identify and plan coherent concept and pilot project on urban roadways and transportation system development. In addition, MRDI?s SPD will be involved in coordination for development of integrated land-use (and/or other applicable spatial or urban development plan) for Kutaisi based on integrated approach to promote and secure long-term CCM and SLM benefits.

Municipal Development Fund of Georgia (MDF)	Municipal Development Fund of Georgia (MDF) was established in 1997 by the Government of Georgia. The Fund is cooperating with all large investment banks and financial institutions operating in Georgia. It is coordinated by the Supervisory Board approved by the Government of Georgia and the Ministry of Regional Development and Infrastructure of Georgia (MRDI). MDF operates with the objective of assisting to enhancement of institutional and financial capacities of local self-government bodies (<i>cities and municipalities</i>), making investments in local infrastructure and services, and improvement of main economic and social conditions for the local population. MDF implements the significant infrastructural projects (<i>incl. international donors financed projects</i>) such as urban renovation of the cities, arrangement of infrastructure at tourist and cultural heritage monuments, improvement of infrastructure aimed at preventing the natural disasters, arrangement of the cableways, renovation of sports infrastructure, and enhancement of the component in support of State and Private Sector Investments (PPI). Permanent consultations and direct involvement of MDF in implemenation of urban planning activities under the project will be of particular importance for achieving project outcomes and outputs.
National Center for Disease Control and Public Health (NCDC)	 National Center for Disease Control and Public Health (NCDC) is designated as a central agency for public health in Georgia operating under the umbrella of the Ministry of Health. Early detection and prevention of diseases is NCDC?s core mandate. The Center has a significant role in development of country's health care system and improvement of public health. A precondition of implementation of the Center?s major objectives is a strong infrastructure, modern laboratories, and most significantly, highly trained human resources. Through its mandate covering, among other functions, development of state rules, standards and regulations for public health, biosecurity and laboratory activity; and preparing for and responding to public health emergencies and disasters, the NCDC will take part in developing integrated land-use plan for Kutaisi City taking into account specific transportation/travel needs of women, children, disabled and other vulnerable groups with view of Novel Coronavid-19 considerations.

City of Kutaisi	 Kutaisi City is independent, self-governing city which acts on the basis of rights and responsibilities granted under the Local Self-Government Code of Georgia of 2014[1]. Head of the City is the Mayor who is elected through universal vote by all residents of the city. Legislative body of the City is elected City Council (<i>?Sakrebolo?</i>), while executive functions are performed by the City Hall (<i>known also as City Administration</i>). Amongst other municipal services that are being provided, functions of Kutaisi City Hall (<i>kutaisi City Administration</i>) that are relevant to this project include the development and implementation management of the City's sustainable transport plan and SEAP that is signed under the Covenant of Mayors (CoM). Relevant functional units of the Kutaisi City to be involved with a sustainable transport plan in Kutaisi would include: The Strategic Planning, Investment and Economic Development Department; The Municipal Transport Department in developing the city transport system through their subsidiary - Kutaisi Auto transport Ltd, which serves as municipal bus company 100% owned and managed by Kutaisi City, noted as a progressive enterprise with transparent business practices and modern technologies to improve public transport services in Kutaisi; and The Architecture and Urban Planning Services with whom agreements and cooperation in developing the pilot concepts are
	approved. The City of Kutaisi will be the main partner and key decision maker in all the stages of the project development. Project local coordinator will be sitting at the building of the city hall and will jointly plan day to day implementation of the project activities together with the project director appointed by the city of Kutaisi.
Ministry of Finance (MoF)	Ministry of Finance (MoF) is responsible for public finance, fiscal and budgetary management (<i>incl. allocation of state</i> <i>transfers from state budget to local-self-government /cities and</i> <i>municipalities/ budgets</i>). MoF is central body in charge of budgetary planning at national level. MoF will contribute by providing recommendations and suggestions for financing of innovations related to the low emission urban transportation planning and management system development in Kutaisi City.

Other municipalities in Imereti Region	City of Kutaisi is center of Imereti Region. The municipalities of the Imereti Region including Chiatura, Tkibuli, Tskaltubo, Baghdati, Vani, Zestafoni, Terjola, Samtredia, Sachkhere, Kharagauli and Khoni are also seeking to implement a green urban development plan as well as undertaking sustainable transport measures. They seek guidance for undertaking these measures, which will in large part be guided by the demonstration projects in urban transport development in Batumi. Representatives of these municipalities will be invited to participate in stakeholder engagement workshops in order to get their feedback for the design of the project activities.		
Local NGOs and CSOs (e.g. women initiative groups)	 Local NGOs and CSOs play a prominent role in informing public policy about the options of improving public transport, reducing traffic congestion and promoting awareness on sustainable transport efforts. Local NGOs and CSOs will help to identify gaps and challenges related to the application of Integrated Green city concept, and to identify the most efficient mechanisms related to public participation in related decision-making processes. Project will closely cooperate with Gender Commission established by Kutaisi City Council (<i>?Sakrebulo?</i>) under Georgia?s <i>Gender Equality Act of 2010</i>[2]. Gender Commission consists of 7 Kutaisi City Council members, 7 Kutaisi City Administration representatives and 7 local CSO representatives. Main function of the Gender Commission is to work on Gender equality annual action plans for Kutaisi City. 		
European Bank for Reconstruction and Development (EBRD)	EBRD is implementing Green Cities Framework and the Initiative Green Cities in Georgia. EBRD is also partner of the UNEP led ?E-mobility and cities? program and is leading a hub in Europe under this program. EBRD will be consulted during the PPG for project planning and design. Furthermore, options for collaboration with EBRD?s e-mobility program will also be discussed during the PPG phase.		

Private Sector Entities	The private sector plays an important role in supporting green development. For both low emission transport opportunities and energy efficient building standards, the private sector is a key recipient and beneficiary, not only contributing to upgrading existing and establishing new infrastructure, but also for facilitating technology transfer and as knowledge and information multiplier. Local private sector entities will further be involved in pursuing green investment and will participate in capacity development activities to obtain required knowledge and skills to identify and carry out such business opportunities. Also, private sector will be engaged in the project through close consultations during through land-use and transport planning processes.
	land-use and transport planning processes.

[2] Gender Equality Act (2010) // Law of Georgia on Gender Equality of 26 March, 2010 (Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Ref.: 2844-Is, Registration Code No. 010.100.000.05.001.003.962/ Consolidated Version as of 19.02.2019 as modified by 8 amending Laws) - [Unofficial Translation in English] https://matsne.gov.ge/en/document/view/91624

3. Gender Equality and Women's Empowerment

Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).

Achieving gender equality on the way to building a democratic state has always been challenging for Georgia. Although the Georgian government has made some positive attempts to elaborate and implement a gender equality strategy and has adopted international obligations, there is an overall consensus that it must make a greater commitment to ensure gender equality and combat all kinds of discrimination against women. According to official data share of women is more than 52% out of total population. The project activities will contribute directly and indirectly towards improving the condition of women by enhancing their capacity to participate in decision-making processes and to engage in green development activities that have the potential to

^[1] Local Self-Government Code of Georgia (2014) // Organic Law of Georgia ?Local Self-Government Code? of 05 February, 2014 (*Official Gazette of Georgia ? Legislative Herald of Georgia* (*LHG*), web-page: matsne.gov.ge, Ref.: 1958-IIs, Registration Code No. 010250000.04.001.016100 / Consolidated Version as of 29.05.2020 as modified by 50 amending Organic Laws) - [Unofficial Translation in English] https://matsne.gov.ge/en/document/view/2244429

improve their economic situation. Women will benefit particularly from skill development (education/training) and improved access to modern technologies and knowledge, which will contribute to increasing both the incomes and social capital of women. A gender mainstreaming approach will be best undertaken towards integrated green urban and sustainable land use planning throughout this project. Planning goals and their concrete application and implementation will be evaluated in terms of specific criteria and integrated into mediation and participation processes that will take into account the different needs of male and female populations. Expected gender study under the project will include gender-mainstreaming recommendations to ensure that gender consideration is properly taken into account in nature-based urban development with a view of national gender equality legislation[1] and existing nationwide gender equality barriers and obstacles[2]. In addition, during the project preparation phase, a specific budget will be allocated for gender-related analyses, and wherever possible, gender-sensitive indicators and sex-disaggregated data, as well as gender mainstreaming specific activities will be included in the project?s action, monitoring and evaluation plans.

To meet the requirements of the GEF Policy on Gender Equality (2017), the Project Gender Action Plan (GAP) will be elaborated during the PPG phase. The Plan will be designed in accordance with the GEF Policy. The Project will ensure equal opportunities for women and men of Kutaisi municipality to participate in, contribute to, and benefit from the Project. Project activities will be designed and implemented in an inclusive manner. Women's organizations based in Kutaisi will be invited to the consultation meetings.

Gender Equality Act (2010) // Law of Georgia on Gender Equality of 26 March, 2010 (Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Ref.: 2844-Is, Registration Code No. 010.100.000.05.001.003.962/ Consolidated Version as of 19.02.2019 as modified by 8 amending Laws) - [Unofficial Translation in English] https://matsne.gov.ge/en/document/view/91624

^[2] Parliament of Georgia (2018). Gender Equality in Georgia: Barriers and Recommendations. http://www.ge.undp.org/content/georgia/en/home/library/democratic_governance/gender-equality-ingeorgia.html

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes

closing gender gaps in access to and control over natural resources;

improving women's participation and decision-making; and/or Yes

generating socio-economic benefits or services for women.

Will the project?s results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Will there be private sector engagement in the project?

Yes

Please briefly explain the rationale behind your answer.

The private sector will be engaged in the project through consultations during land-use and low-carbon transport planning processes. The private sector can play an important role in terms of investments mobilization potential. Also, private sector representatives will participate in capacity development activities to obtain the required knowledge and skills to identify and carry out best and environmentally friendly business opportunities.

For a low emission transportation system, the private sector is a key recipient and beneficiary, not only contributing to upgrading existing and establishing new infrastructure, but also for facilitating technology transfer and as knowledge and information multiplier. Local private sector entities in Kutaisi City will further be involved in pursuing green investment and will participate in capacity development activities to obtain required knowledge and skills to identify and carry out such business opportunities (*Component 1. Strengthening planning and institutional frameworks enabling sustainable development in the City of Kutaisi and Component 3. Capacity development, knowledge management and M&E for integrated low carbon city development*). Also, the private sector will be engaged in the project through close consultations during through land-use and transport planning processes (*Component 2. Facilitating investment in low emission electric public transportation and green city development*).

For the purpose to comprehensively engage the private sector in full-scale project proposal development stage, green development and low carbon transportation-related private sector survey and basic needs assessment will be held for Kutaisi City (Output 3.1.1 Capacity needs assessment and capacity development plan prepared). Key actors from the private sector of Kutaisi City will be closely involved in the development of Integrated land-use or other applicable spatial or urban development plan for Kutaisi (*Output 1.1.1*), Low emission electric urban transportation and green city development needs assessed, and resource mobilization strategy/plan (*Output 2.1.1*), Economic and financial analysis and design of low emission electric public transportation solutions (*Output 2.1.2*) and GCF concept note to scale up low-carbon transport in Kutaisi (*Output 2.1.3*).

In addition, the project will encourage private taxi vehicles in Kutaisi City to be gradually changed from fossil fuel cars to electric cars. Promotion of this policy will be implemented through the development and then advocacy for policy-driven adoption of Kutaisi City Local Five-Year Development Plan with the goal of turning the city into one of the leading cities in Georgia in % of electric and hybrid vehicles. Kutaisi City as an independent and self-governing city which acts on the basis of rights and responsibilities granted under the Local Self-Government Code of Georgia of 2014[1] is legally authorized to adopt such local plans. The Plan will incorporate incentives like local tax and transport licensing fee exemptions and credits, and additional perks that range from purely economic incentives to medium and longer-term regulatory signals with specific target timeframes such as local CO2 emissions regulations, stringent fuel economy standards, and the phase-out for internal combustion engine vehicles within the boundary of the city. The project will assist Kutaisi City to prepare cost-benefit analyses for the above Plan.

[1] Local Self-Government Code of Georgia (2014) // Organic Law of Georgia ?Local Self-Government Code? of 05 February, 2014 (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG), web-page: matsne.gov.ge, Ref.: 1958-IIs, Registration Code No. 010250000.04.001.016100 / Consolidated Version as of 29.05.2020 as modified by 50 amending Organic Laws*) - [Unofficial Translation in English] https://matsne.gov.ge/en/document/view/2244429

5. Risks to Achieving Project Objectives

Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)

Table 4: 1	Risks	and	Mitigation	Measures
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Risks	Rating	Mitigation Measures
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Lack of Municipal co- financing to invest in sustainable transport	Medium	This risk is rated as medium due to the fact that the central government of Georgia always transfers funds according to the approved budget. The mitigation measure for this risk is to firstly ensure strong level of communication with the City Administration during all phases and ensure reflection of the committed funds in the budget of the city.
Lack of Public Interest in Cycling in Kutaisi	Low	Kutaisi is a tourist hub destination in Georgia. Tourists are less likely to want to drive cars in the center of the city. An increased emphasis on recreation, health and fitness will mean that there is a very low risk that there is a lack of public interest in Kutaisi. Several cycling lanes (2 lines) already in place in the city center show that there is a public interest in cycling in Kutaisi. This risk could be mitigated through public awareness campaigns (respective short snapshots will be prepared and broadcasted in the city) to be implemented from the yearly stage of project implementation. In addition to this he project will work closely with the MEPA, MESD and MRDI, international organisations /initiatives (like Transport, Health and Environment Pan-European Programme of UNECE) and considers possibility to jointly organize cycling promotion events.

Assessment of climate change

Based on the assessment of current changes in climate on the basis of existing statistical data (1955-2005), there is a trend in increase of both mean annual air

temperature and annual precipitation. At the same time, air temperature absolute minima and absolute maxima were examined. The analysis indicates a warming trend in these regions both in winter and summer seasons.

Based on the PRECIS model results for periods 2020-2050 and 2070-2100 periods for diverse scenarios of global socio-economic development, including two GCMs (HadAM3P and ECHAM 4), the region will continue to experience warmer temperatures towards the mid- and late part of the century. Average annual temperatures are expected to increase by 0.8?1.4?C by 2050 and 2.2?3.8?C towards 2100. The temperatures in the mountainous areas are predicted to be among the areas with the greatest temperature increase by the end of the century. Data on precipitation is less certain than for temperatures. Precipitation is expected to increase in nearly all of the territory up to 2050, but then drastically decline towards 2100.

Hazard Assessment

The predicted changes in climate elements to the end of the current century are considered to produce an impact on water resources, ecosystems, and the economy of the region.

In the seasonal distribution of run-off, a significant decrease (by 41%) was derived for summer, with a moderate increase (by 11%) in spring, allowing the anticipation of some decline in the intensity of summer floods.

The increase in the frequency of disastrous events: heavy precipitation, floods and landslides, will negatively affect the low-efficiency agricultural development of the region, which may increase migration from rural areas to city centers. The projected trends of climate change for the region, if they come about, may presumably further increase the vulnerability of forests.

Plans for mitigation

During the project implementation, Kutaisi municipality's capacity will be strengthened to deal with extreme climate events in general. The project will also build capacity on climate risk assessment and mitigation through training workshops.

Project interventions will consider climate risks, and plans will include preventive measures against extreme events. The resilient infrastructure concept will be considered during the implementation and feasibility studies will consider resilience while assessing the technical options.

Although the climate change risk is considered low for the Project, a detailed evaluation of climate change risks and risk management options will be conducted during the PPG phase.

Increasing traffic & car ownership, resulting in increases in GHG emission higher than reductions achieved by the project	Low	Even if GHG emissions are reduced by project activities, there is a risk that a planned reduction cannot be achieved due to increases in overall number of cars and traffic. Mitigation measures could cover close work, lobbing and advocacy with central and municipal level decision-makers to strengthen administrative measures aimed at reduction of quantities of used and outdated cars.
Increasing number of visitors in the Sataplia natural reserve that may lead to nature degradation	Low	The risk of nature degradation form increasing number of visitors to the Sataplia natural reserve will be mitigated through measures aimed at setting of environmentally sound annual quotas for visitors.
Low political priority	Low	Clearly defined work scope and performance monitoring by Kutaisi City and the project will mitigate the risk and create motivation for good performance of partner institutions. Also, the project proposal includes capacity building and awareness raising measures designed to create the necessary motivation.

Risks related to novel Coronavid-19 pandemic and post-pandemic restrictions	High (in short and midterm periods) Medium (in long-term period)	General measures: Georgia shifted its COVID-19 lockdown, sustaining assistance to vulnerable persons is key to preventing any renewed outbreak of the virus. The Government and the UN organizations prioritize providing home care support and other services to vulnerable people at high risk of contracting COVID-19. The project development team will make use of the Government's and UN country system to address the pandemic situation in a timely manner taking into consideration potential socio-economic impacts. For any hardware installation, works will be completed in line with public health and safety requirements. Based on future lock-down scenarios, project activities on the ground will be paused, and activities that can be done remotely or online will be prioritized. Risk Analysis: There is a tendency to shift away from shared mobility and public transit to reduce the risk of infection. The Project team will need to work with public health experts to ensure that the offered new low carbon transportation options consider public health and ready for the new normal. The Project will need national and international expertise during project development and implementation. Due to travel restrictions, priority will be given national expertise for the activities on the ground and stakeholder engagements. The international expertise will be still utilized, but the implementation modality will be remote support and supervision. The major co-finance resource will be the Municipality of Kutaisi, during the PPG phase co-finance sources when in-person meetings are allowed, public health requirements are followed. In cases when in-person meetings are not possible, online tools will be used to organize meetings. To reduce data transfer traffic, documents and presentations will be shared with participants before the meetings. Opportunity analysis: the COVID-19 crisis can provide opportunities to showcase the project's successes if its impact is successfully bundled with public health benefits. New low carbon public transportatio
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Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

? At PIF stage, the Regional Environmental Centre for the Caucasus (REC Caucasus) has been designated by the Recipient Government (Ministry of Environmental Protection and Agriculture of Georgia - MEPA) as the Project Executing Agency. UNEP will be the GEF Implementing Agency (IA) for the project. A task manager will be appointed by UNEP to oversee the implementation of the project, assisted by support staff. The Ministry of Environmental Protection and Agriculture of Georgia (MEPA) will be the beneficiary of the project. REC Caucasus, with technical competence and administrative preparedness for entering into delivery-based contracts, will serve as the project Executing Agency (EA).

? A Project Steering Committee (PSC) will be established by the MEPA and co-chaired by the Beneficiary (MEPA) and City of Kutaisi. REC Caucasus will perform tasks of the secretariat for the PSC. Along with the representatives of the EA, the PSC will be comprised of UNEP Project Task Manager, the representatives from relevant line ministries, including the Ministry of Economy and Sustainable Development (MESD) and other stakeholders. The PSC will hold meetings at least twice a year, but additional meetings can be held if necessary. The PSC should make necessary decisions/recommendations in accordance with the rules and regulations of UNEP and the GEF.

? MEPA and Kutaisi City will jointly designate a National Project Director (NPD). NPD will be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project partners. He/She will also be responsible for supervising and guiding the Project Coordinator on government policies and priorities.

? The members of the PSC will each assure the role of a Focal Point for the project in their respective agencies. Hence, the project will have a Focal Point in each concerned institution. As Focal Points in their agency, the concerned PSC members will: (i) technically oversee activities in their sector; (ii) ensure a two-way fluid exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and links between the project activities and the work plan of their agency; and (iv) facilitate the provision of co-financing to the project.

? As may be required on specific issues, an advisory (ad hoc) group can be formed to offer any other guidance or expertise as required by the specific agenda of the PSC.

? Figure diagram below presents the institutional structure with major stakeholders of the project including monitoring and evaluation coordination at the project level.

? Diagram 1. Institutional structure of the project

?

Project Steering Committee (PSC)

Members:

The GEF Implementing Agency: UN Environment

The Project Executing Agency (EA): REC Caucasus

The Beneficiary : Ministry of Environment Protection and Agriculture (MEAPA) and Kutaisi City

Ministry of Economy and Sustaibale Development (MESD)

Representatives of Kutaisi City administration

Other ministries, agencies and NGO representatives as required

Roles: Project oversight and guidance. Provide overall guidance and ensure coordination between all parties. Provide overall supervision for project implementation. Approve the annual workplan and buget

MEPA and Kutaisi City

(The Beneficiaries)

Project Collaborators

Project Partners

Project Executing Unit

REC Caucasus

(Executing Agency)

UN Environment

(Implementing Agency)

Main function: Project implementation, Serve as the Steering Committee secretariat, Liason between Implementing Agency (UN Environment) and the MEPA

Members:

Project Director (REC Caucasus)

Project Administrative and Financial Assistant (REC Caucasus)

REC Caucasus technical staff

Roles:

Project execution, monitoring and reporting, liason with Project Director and all project partners, secreteriat to the Project Steering Committee, ensures all technical aspects of the project, guides project governance and oversights finance

Governmental agencies, Internatioanl and National NGOs and CSOs; Scientific organizations; Women's and Youth Associations; Private sector; Other partners and collaborators as required

Development, coordination and management of Monitoring and Evaluation of the Project

? The project will collaborate with UNEP Energy and Climate Branch of Economy Division and UNEP?s Electric Mobility Programme[1] which supports countries, with a special focus on countries with emerging economies, in introducing electric mobility. The Programme is a major contribution to UNEP?s work on air quality, in specific the UNEP Assembly?s Air Quality Resolution and the implementation of the Paris Climate Agreement. The Electric Mobility Programme is currently the only global programme that supports electric mobility for developing and transitional countries. As of today, UNEP is supporting over 50 countries and cities to introduce electric buses, cars and two and three wheelers. UNEP?s Electric Mobility program involves all stakeholders leading global agencies in the field of electric mobility through partnerships.

? The project will ensure good coordination with on-going GEF-financed and non-GEF initiatives being implemented by UNEP and by other international agencies. More specifically, a clear link will be established with GEF funded ?Georgia: Green Cities: Integrated Sustainable Transport for the City of Batumi and the Adjara Region (ISTBAR)? project. The project will use knowledge and outputs of ISTBAR to increase the impact and reduce the cost.

? The project will coordinate with ongoing GEF financed **Project** ?Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia? (GEF CEO Approved on 26-Jan-2018) is a USD 1,452,968 GEF initiative, led by UNEP, and has a duration of 3 years (GEF ID: 9730). The project aims to develop and strengthen sustainable land management (SLM/LDN) practices and build capacity at the municipal scale for their application for the protection of natural capital in Georgia. This objective is being carried out through three components, as follows:

? **Components 1**: Creating an enabling environment at the municipal scale for achieving Land Degradation Neutrality (LDN) country voluntary target. This first component will map land degradation trends and establish an LDN local baseline. Moreover, it will establish local multistakeholder groups, develop LDN target setting programs along with LDN local transformative projects/programmes of actions. Lastly, it will develop integrated land use plans for pilot municipalities

? **Components 2:** Pilot implementation of measures avoiding degradation, intensifying sustainable land management practices and land rehabilitation to improve ecosystem functions and services. Component 2 will identify local measures to prevent changes in the characteristic of soil, wind erosion, salinization and loss of natural fertility of the soil. Secondly, it will sequester 15,500 t CO2-eq through restoration of 10,000 ha of degraded land. Subsequently, the capacity of communities and farmers on SLM/LDN will be improved. Fourthly, required changes will be defined by local farmers/ farmers? associations once current agriculture practices are assessed. Ultimately, this component will promote market access mechanisms.

? **Components 3:** Knowledge management and capacity building. Component 3 will capture and disseminate best practices for SLM/LDN, create a web-based national SLM/LDN knowledge management hub, conduct awareness-raising campaigns on SLM/LDN planning and implementation, develop compelling cases for economic benefits derived from SLM/LDN, and provide training to decision makers.

? The project will also liaise closely with GEF-funded projects under the GEF Cities IAP[2] and will attempt to learn from and use similar methodologies and indicators as they evolve, including methodologies and indicators under GEF7 UNEP led Sustainable Cities Impact Program (SCIP)[3] and its capacity-building components, such as: Training of urban actors through regional city academies group around identified topics; Technical assistance for city officials integrated urban solutions; Participation of key urban actors in peer exchanges, matching cities by interest, with knowledge providers from City-Based Organizations (CBO?s) network opportunities and extended partners; Support to access finance opportunities through existing project preparation facilities, Regional Development Banks (RDB) and International Financial Institutions (IFIs) cities initiatives, and SCIP Global Platform sponsored matchmaking opportunities and use of Global convening space with website available to exchange knowledge.

? The EBRD Green Cities Framework - Pre- & Post-Signing TC Support: Green Cities Action Plan & Policy Dialogue opportunity EBRD?s ?Green Cities Georgia? planned project falls within the EBRD's Green Cities Framework Initiative. The EBRD is considering the development of the Framework ("FW") to support municipal investments by addressing key environmental challenges a number of Georgian cities are facing. While initial loans will be sovereign with on-lending to Cities and utility companies, the FW will also pursue non-sovereign lending structures. The FW will seek to mobilize grant financing from international donors for capital investments and technical cooperation to support the broader transition objectives, implementation support and policy dialogue. The FW will also include engagement with local communities on the benefits of the Green City initiative. As to the transport impact, each city that will participate in this FW will carry out a strategic planning exercise, and would furthermore pursue a minimum of two other TI objectives identified below: Establishment of transparent contractual arrangements for municipal service provision; Support for transport integration measures through the SUMP; Improved commercialization through corporate development. The proposed FW will consist of a facility of up to EUR 100 million to support municipal investments related to "Green Cities". The total project cost is estimated at up to EUR 130 million including cofinancing provided by an international donor(s). The project will also benefit from technical cooperation assignments to support preparation and implementation of sub-projects.

? The policy framework for Green Transportation in Georgia developed by the World Bank focused at national level and is yet to be implemented. A new law on transport for Georgia is yet to be adopted and a national transport plan is also not finalized. The project will have good opportunity to collaborate with this initiative.

? At the same time, a number of ongoing projects and initiatives in Georgia contribute to the green urban planning and promote reduction of greenhouse gas emissions and increased climate resilience, including aspects related to an urban setting and these associated initiatives and policy documents provide entry points for this project. Opportunities for collaboration and alignment with the following projects and strategies will be explored at PPG phase:

(i) Covenant of Mayors initiative. At the Covenant of Mayors Conference held in Georgia in October 2010, the role of cities as complex systems having a significant capacity to reduce greenhouse gas emissions was stressed. Municipalities have been identified as a main driving force in guiding the development and implementation of the Sustainable Energy Action Plan (SEAP) within EU energy efficiency priorities. Eleven Georgian cities including Kutaisi, have signed the Covenant of Mayors (CoM). In 2011, by signing the Covenant of Mayors, Kutaisi City Hall joined an initiative under which Kutaisi should achieve reduction of greenhouse gas emissions by 23% by 2020 -a goal that will be achieved along with social and economic development of the city.

(ii) Georgia?s Integrated Transparency Framework for Implementation of the Paris Agreement in the framework of GEF?s Capacity Building Initiative For Transparency (CBIT) ? Implemented by UNEP and executed by REC Caucasus. The CBIT Project has three aims: Strengthen national institutions for transparency-related activities in line with national priorities; Provide relevant tools, training, and assistance for meeting the provisions stipulated in Article 13 of the Agreement and Assist in the improvement of transparency over time.

(iii) Georgia is currently developing, with assistance from UNEP, and building on GIZ?s policy analysis, a Green Economy Strategy, under the framework of Greening Economy in Eastern Neighborhood Partnership Countries (including Georgia) financed by European Union, jointly implemented by OECD, UNECE, UNEP and UNIDO. The strategy aims at contributing to Georgia?s sustainable economic growth and attracting new technologies.

(iv) The UNDP-GEF project ?Harmonization of Information management for improved knowledge and monitoring of the Global environment in Georgia? implemented by the Environmental Education Centre, is intended to develop capacities in Georgia for an effective national environmental management framework that addresses different articles under the UNFCCC, UNCCD and UNCBD. The project objective is to develop individual and organizational capacities in the MEPA and its Environmental Information and Education Center (EIEC) for improved monitoring of environmental impacts and trends and for the elaboration of collaborative environmental management.

(v) Currently, the Regional Environmental Centre for Caucasus (RECC) is executing the UNEP implemented GEF funded projects: ?Applying Landscape and Sustainable Land Management (L-SLM) for mitigating land degradation and contributing to poverty reduction in rural areas?; ?Generating economic and environmental benefits from sustainable land management for vulnerable rural communities of Georgia? (The SLM related activities of Component 1 and 2 of this project will be designed based on the early results of these project); and ?Georgia?s Integrated Transparency Framework for Implementation of the Paris Agreement?.

(vi) The Global Forest Watch project (GFW), executed by the World Resources Institute, aims at empowering decision-makers in government, the private sector, and civil society with technology and information necessary to reduce deforestation and land degradation, combat illegal activities, and conserve biodiversity in Georgia. Although, the pilot site of this project is different from the GFW, the project team will discuss the potential collaboration options with GFW.

(vii) Regional Development Programme of Georgia for 2018-2021 was approved with support of EU in 2018. One of the programming priority (*Priority 1. Improvement of key infrastructure supporting competitiveness and environmental sustainability of the country and regions*) is to meet requirements for growing demand for improvements in public transport that had not been addressed adequately in most of the cities due to lack of resources, insufficient urban transport infrastructure and services and lack of qualified staff and adequate management structures, including cooperation platforms for various actors from broader functional areas of cities concerned (*transport companies, citizens, municipalities, central government*). The programme stipulates that in order to address the challenges of the urban transport in Georgia an integrated reform is needed, transforming the overall transport system organization and financing as well as changing the mobility patterns and behavior of people and

businesses in urban areas and *reducing the emissions generated by the transport sector*[4]. Implementation of such reform should be accompanied by the long-term investment plans in crucial infrastructure and re-organization of public transport systems in functional areas of biggest cities: Tbilisi, Batumi, Kutaisi and - when relevant ? others. With the above regard the Programme sets *?number of new eco-friendly and adaptive buses*? as one of the results indicators for the programme. The project will contribute to implementation of integrated urban transport development related priorities set under the Regional Development Programme.

? In addition, regular information exchange and coordination will be ensured with other related initiatives managed by municipal authorities such as the Sustainable Energy Action Plan (SEAP) for Kutaisi and/or initiatives funded by other donors, such as the EBRD, USAID, the World Bank Framework for Green Transportation initiative, and the European Union among others.

[1] UNEP?s Electric Mobility Programme. https://www.unenvironment.org/explore-topics/transport/what-we-do/electric-mobility/why-does-electric-mobility-matter

[2] see https://www.thegef.org/topics/sustainable-cities

[3] Sustainable Cities Impact Program (SCIP). https://www.thegef.org/project/sustainable-cities-impact-program

[4] **Development of integrated urban transport systems (VII.1.9. Measure 1.9)** / Regional Development Programme of Georgia 2018-2021 // Endorsed by Ordinance of the Government of Georgia No.1292 of June 11, 2018 - [*Unofficial Translation in English*]

https://mrdi.gov.ge/pdf/5d11c43dcd7cc.pdf/2018-2021%20Regional%20Development%20Programme%20of%20Georgia%20%28Unofficial%20translat ion%29.pdf

7. Consistency with National Priorities

Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?

Yes

If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc

? Georgia, through the INDC communicates its intention to reduce greenhouse gas (GHG) emissions by at least 15 % below 1990 level of its domestic total greenhouse gas emissions by 2030. Georgia is committed to a target of 40 % of its total greenhouse gas emissions by 2030 compared to 1990 with the international support. Georgia recognizes the importance of each country?s share in

reducing GHG emissions as a valuable contribution to the mitigation of global climate change. Georgia intends to mitigate from the greenhouse gas emissions in the transport sector. Activities at the local level should be given priority as well as projects, which involve technology transfer and promotion of innovative approaches using new technologies. Given that this project will promote less carbon intensive sustainable transport at the local level, working closely in partnership with municipal authorities, this project can be said to be fully consistent with its INDC, the National Communications to the UNFCCC.

? In 2019, Government of Georgia approved National Document for Sustainable Development Goals[1]. The document depicts the priorities of UN SDGs at national level, aimed at promoting the implementation of SDGs and introducing evidence based national policy according to the 2030 agenda. The process of nationalization of goals was commenced in 2015. Following long consultations, considering the challenges and the national context of the country, internal priorities of the UN SDGs have been determined and a number of targets have been adjusted to Georgia. Given the comprehensive nature of the document, the achievement of each sector-specific target is prescribed in time and baseline (2015 data) and target indicators (for 2030) are established. The mentioned approach is a unique possibility for measuring progress and evaluating the achievement of goal, which is extremely important for planning sector specific policy supported by evidences and information. The project will build the locally relevant knowledge base and capacities of planners to integrate projections in public policies, strategies and development plans, in alignment with SDG target 3.9 (by 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination), SDG target 11.6 (by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management), SDG target 13.2 (integrate climate change measures into national policies, strategies, and planning), SDG target 15.2 (By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally) and SDG target 15.3 (By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world)[2].

? Findings of the Georgia?s 3rd National Communication to the UNFCCC make it clear that the transport sector is the large source of GHG emissions for the country and is an area where greater attention and investment are required to developing and implementing mitigation strategies to reduce GHG emissions. In 2012, the World Bank developed A Policy Framework for Green Transportation in Georgia, which identifies a set of recommended policies for sustainable transport development. This document has not been implemented in a National Transport Policy yet and there is not yet any new national law on transport, which would help promote sustainable transport. More detailed sectoral analyses of the transport sector are currently underway by the Ministry of Economy and Sustainable Development of Georgia.

? In 2016, Georgia joined the Land Degradation Neutrality Target Setting Programme (LDN-TSP), committing to establish national voluntary targets for LDN and identifying transformative projects to achieve these targets. The proposed project will provide support to the Georgian government in fulfilling the LDN target-setting program.

? The project will contribute to the implementation of the commitments of the City of Kutaisi under the EU Covenant of Mayors. As part of the commitment, Kutaisi should aim to reduce GHG emissions by at least 20% by the year 2020. The Sustainable Energy Action Plan for Kutaisi is already in place and it will play an important role in directing of the City of Kutaisi?s efforts to implement the commitments under the EU Covenant of Mayors.

? EU-Georgia Association Agreement/DCFTA. Greening urban policies and key urban sectors is also in line with the EU integration agenda pursued by the country, Georgia signed an association agreement with the European Union on June 27, 2014. The Association Agreement with the EU includes the development of political, trade, social, cultural, and security links.

[2] All these targets have only qualitatively adjusted indicators set at national level under the National Document for SDSs of 2019, which, in turn, are fully identical to the global qualitative indicators that measure the progress of Global targets for 2020-2030.

8. Knowledge Management

Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

? The proposed project will build upon and collaborate with the on-going projects and initiatives already mentioned in Section 5 above. Component 3 of the project will involve existing experience (e.g., GEF/UNDP financed project on sustainable urban planning for the City of Batumi ? ISUMP, GEF financed, GEF financed Project ?*Generating Economic and Environmental Benefits from*

 ^[1] SDGs National Document for Georgia (2019) / Endorsed by Ordinance of the Government of Georgia N2338 of November 12, 2019 ?On Endorsement of Sustainable Development Goals National Document? // Legislative Herald of Georgia (LHG), Official web-page matsne.gov.ge, 13-12-2019, Registration Code 00000000.003.025797 ? [Georgian Version] https://matsne.gov.ge/ka/document/view/4732470

Sustainable Land Management for Vulnerable Rural Communities of Georgia? (GEF CEO Approved on 26-Jan-2018) is a USD 1,452,968 GEF initiative, led by UNEP) to support effective knowledge management related to green urban planning objectives. Lessons learned on best practices and integrated models of sustainable green urban design, planning and implementation during trainings and public awareness activities, and reports will be elaborated and sent out with the conclusions and suggestions to relevant authorities and institutions. Web-based instruments will be developed to communicate and promote project outputs and deliverables. In addition, this project will link with other countries? green urban development projects and will exchange with countries participating in the GEF Sustainable Cities Impact Program (SCIP) through the Global Platform executed by the World Resources Institute.

? Knowledge Management Approach for the project is based on the following steps throughout the Project Cycle shown in Figure 6 below. These requirements cover the 5 phases of the project development, implementation, monitoring and evaluation - including current PIF and foreseen PPG (CEO Endorsement) phases.

Figure 6. GEF-7 Knowledge Management (KM) Requirements throughout the GEF Project Cycle[1]

? For the purposes to (a) foster learning and sharing from relevant projects/programs, initiatives and evaluations and (b) to contribute to the project?s overall impact and sustainability, at the beginning of PPG phase the project will develop internally-focused **Knowledge Management (KM) Strategy and Action Plan** in addition to existing GEF externally focused knowledge and innovation exchange mechanism.

? Development of the KM Strategy (KM) and Action Plan for the project will be guided by Results-Focused Planning Principles for the GEF Partnership**[2]**. This, inter alia, will include (i) first, identification of needs for learning at the project level, which covers standardization of creating, storing and accessing the project documentation and, (ii) second, the corporate-level learning needs, involving the ability of the GEF partnership to collate, analyze and share knowledge in a systematic manner.

? With the above regard, the following key elements of the *Knowledge Management Approach* (*KM*) are taken into consideration to be in line with GEF requirements to foster learning and sharing from relevant projects/programs, initiatives and evaluations, and to contribute to the project?s overall impact and sustainability:

(1) Overview of existing lessons and best practice that inform the project concept

? Main existing lessons and the best practices that inform the project concept are from the following initiatives and platforms:

? Climate-Smart Planning Platform - *CSPP* [3]. The mission of this platform is to help developingcountry practitioners strengthen their climate-smart planning so that it leads to better policy and investment implementation. The CSPP does this by making it easier for practitioners to locate and access the tools, data, and knowledge that they need for climate-smart planning. The CSPP provides a central database of more than 320 tools and datasets from 58 organizations, including user reviews.

? *Global Platform for Sustainable Cities - GPSC*[4]. The GPSC as a partnership and knowledge global platform promotes integrated solutions and cutting-edge support for cities seeking to improve their urban sustainability. Knowledge resources under the GPSC include a wide range of thematic directions such as integrated urban planning, climate change, transit oriented development etc. that are of particular importance for the project.

? *Sustainable Cities Initiative[5]*. Sustainable Cities Initiative is a multi-year program designed by the World Bank to support cities and governmental programs at the national level in pursuing an agenda that enhances the sustainability of cities across Europe and Central Asia (ECA).

? *EU Covenant of Mayors for Climate & Energy Initiative[6]* - the world's largest movement for local climate and energy actions.

? *EBRD Green Cities Programme*[7] strives to build a better and more sustainable future for cities and their residents by identifying, prioritising and connecting cities? environmental challenges with sustainable infrastructure investments and policy measures.

? *The Nature-based Solutions Initiative*[8] is an interdisciplinary programme of research, policy advice and education based at the University of Oxford. It brings together natural, physical and social scientists with economists, governance and finance experts from across the University and beyond. Its

mission is to enhance understanding of the potential of Nature-based Solutions to address global challenges and increase their sustainable implementation worldwide.

? *Network of Nature-based Solutions for Urban Resilience (NATURA)*[9] links networks in Africa, Asia-Pacific, Europe, North and Latin America, and globally to enhance connectivity among the world's scholars and practitioners and improve the prospects for global urban sustainability. NATURA exchanges knowledge shares data and enhances communication among research disciplines and across the research-practice divide to advance urban resilience in the face of growing threats of extreme weather events. As an important part of knowledge sharing, researchers and practitioners work together on applications of nature-based solutions (NBS) in a wide range of social, ecological, and technological contexts addressing five gaps: Synergistic benefits of bundles of NBS for urban resilience; Role of social-cultural (S) context in NBS outcomes; Role of ecological-biophysical (E) context in NBS outcomes; Role of technological-infrastructural (T) context in NBS outcomes and Role of SET interactions in NBS outcomes. Through all-hands meetings, thematic working groups, regional nodes, and synthesis writing workshops, NATURA aims to accomplish synthesis and data sharing, and network coordination. NATURA trains postdoctoral scholars and graduate students through learning exchanges to networks around the globe.

(2) Time-linked plan to learn from relevant projects, programs, initiatives & evaluations

? Time-linked Plan for PPG Phase to Learn from Relevant Projects, Programs, Initiatives and Evaluations is shown in Table 5 below.

Table 5. Time-linked Plan for PPG Phase to Learn from Relevant Projects, Programs, Initiatives and Evaluations

PPG Phase Quarter	Step	Action			
Identification and analyses of lessons and best practices that will inform the project proposal					
Q1 1 Lessons learned and best practice kick-off organizational meeting		Lessons learned and best practice kick-off organizational meeting			

Q1	2	Identification of a final list of relevant projects, programs, initiatives and evaluations			
Q2	3	Document findings			
Q2	4	Analyze and organize the lessons learned for application of results			
Q3	5	Store lessons learned			
	Applice	ation of lessons learned and best practice to inform the project			
Q4	6	Creation of effective tool for storing and retrieving (e.g., shared drive) and the beginning of application of stored lessons learned			
Q4	7	Lessons learned and best practice closing working meeting			
Q4	8	Integration of lessons learned and best practices into the project proposal			

? Implementation of the Time-linked Plan will support better incorporation innovation and exchange of evidence on policy solutions. It will technically focus on details for scaling-up of innovative technologies and educational models that have already demonstrated results in other projects and programmes and are ready to be shared at the project?s scale.

? Learning from the relevant projects, programs, initiatives and evaluations will be conducted as the structured production and application of experience-based knowledge to develop and improve Knowledge Management (KM) strategy, organisation, training, materiel, leadership, personnel and facilities to achieve more efficient and effective results under the project.

? In addition to Global Platform for Sustainable Cities (GPSC), Sustainable Cities Initiative, EU Covenant of Mayors for Climate & Energy Initiative and EBRD Green Cities Programme the project will learn in detail from other relevant projects, programs, initiatives and evaluations - initial list of which is identified in Table 6 according to focal/priority areas, business sectors and donor organizations.

Table 6. Initial List of On-going and Completed Relevant Projects, Programs, Initiatives and Evaluations

n/n	Focal/ Priority Area/Business Sector	Primary Donor Organization	Name of relevant Project, Program, Initiative and Evaluation
1	Climate Change	GEF	Green Cities: Integrated Sustainable Urban Transport for the City of Batumi and the Adjara Region, Georgia - Pilot Low-Carbon Urban Transport Corridor and Integrated Sustainable Urban Mobility Plan for the City of Batumi - ISUMP (GEF Project ID: 5468, Implementing Agency: UNDP, Focal Area: Climate Change, GEF Period: GEF-5, Approved for Implementation: Feb-2015)
2	Municipal and Environmental Infrastructure	EBRD EU E5P	Green Cities - Batumi Bus, Georgia / EBRD, EU and Multi-Donor Eastern Europe Energy Efficiency and Environment Partnership Fund (ESP) financed Electric ?Green? Buses Project for Batumi, Georgia (EBRD Project Number: 48104, Implementing Agency: Government of Georgia, Business sector: Municipal and Environmental Infrastructure, Approval Date: Nov 2018)[10]
3	Municipal and Environmental Infrastructure	EBRD GCF	Georgia Urban Transport Enhancement Programme (EBRD Project Number: 50842, Implementing Partner: Government of Georgia, Business sector: Municipal and Environmental Infrastructure, Approval Date: Sep-2020) [11] Green Cities 2 - Window I [Financed by Green Climate Fund] (EBRD Project Number: 50440, Implementing Partner: Government of Georgia, Business sector: Municipal and Environmental Infrastructure, Approval Date: Aug 2018) [12]
4	Power and Energy	EBRD	<i>Georgian Low Carbon Framework</i> (EBRD Project Number: 48124, Implementing Partner: Government of Georgia, Business sector: Power and Energy, Approval Date: Nov 2015) [13]

5	Connectivity, Energy Efficiency, Environment, Climate Change	EU	EU4Climate Project to Support Countries to Implement the Paris Agreement on Climate Change, Improve Climate Policies and Legislation, and Reduce the Impact of Climate Change on People?s Lives - Georgia, Armenia, Azerbaijan, Belarus, Moldova and Ukraine (Project Number: 00115652, Implementing Partner: UNDP, Priority Area: Connectivity-Energy Efficiency-Environment and Climate Change, Approval Date: Jan 2019)[14]
6	Knowledge Management, Environmental Monitoring	GEF	Harmonization of Information Management for Improved Knowledge and Monitoring of the Global Environment in Georgia (GEF Project ID: 5467, Implementing Agency: UNDP, GEF Period: GEF-5, Approved for Implementation: Jan 2015)
7	Climate Change	GEF	Integrated Transparency Framework for Implementation of the Paris Agreement in Georgia (GEF Project ID: 10028, Implementing Agency: UN Environment, Focal Area: Climate Change, GEF Period: GEF-6, Approved for Implementation: Aug 2019)
			Development of Georgia?s Fourth National Communication and Second Biennial Update Report to the UNFCCC (GEF Project ID: 9655, Implementing Agency: UNDP, Focal Area: Climate Change, GEF Period: GEF-6, Approved for Implementation: Nov 2016)

8	Land Degradation	GEF	Achieving Land Degradation Neutrality Targets of Georgia through Restoration and Sustainable Management of Degraded Pasturelands in Georgia (GEF Project ID: 10151, Implementing Agency: FAO, Focal 			
			Contributing to Poverty Reduction in Rural Areas (GEF Project ID: 5825, Implementing Agency: UN Environment, Focal Area: Land Degradation, GEF Period: GEF-6, Approved for Implementation: Feb-2016)			
			Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia (GEF Project ID: 9730, Implementing Agency: UN Environment, Focal Area: Land Degradation, GEF Period: GEF-6, Approved for Implementation: Jan 2018)			
9	Climate Change	GEF	Green Logistics Program (non-grant) / Enhanced implementation of green logistics in the Black Sea and Mediterranean regions - incl. in Georgia (GEF Project ID: 9047, Implementing Agency: EBRD, Focal Area: Climate Change, GEF Period: GEF-6, Approved for Implementation: Feb-2016)			
			GEF SGP Sixth Operational Phase- Strategic Implementation using STAR Resources (GEF Project ID: 9857, Implementing Agency: UNOPS, Focal Area: Climate Change-Biodiversity-Land Degradation, GEF Period: GEF-6, Approved for Implementation: Apr-2018)			

10	Biodiversity	GEF	Upscaling of Global Forest Watch in Caucasus Region - Georgia, Armenia, Azerbaijan (GEF Project ID:10050, Implementing Agency: UN Environment, Focal Area: Biodiversity, GEF Period: GEF-6, Approved for Implementation: Sep 2019)			
			Enhancing Financial Sustainability of the Protected Area System in Georgia (GEF Project ID: 9879, Implementing Agency: UNDP, Focal Area: Biodiversity, GEF Period: GEF-6, Approved for Implementation: Aug 2018)			
11	Climate Change	GEF	Enhancing Resilience of Agricultural Sector in Georgia (GEF Project ID: 5147, Implementing Agency: IFAD, Focal Area: Climate Change, GEF Period: GEF-5, Approved for Implementation: Jan 2015)			
			Stabilizing GHG Emissions from Road Transport Through Doubling of Global Vehicle Fuel Economy: Regional Implementation of the Global Fuel Economy Initiative - GFEI (GEF Project ID: 4909, Implementing Agency: UN Environment, Focal Area: Climate Change, GEF Period: GEF-5, Approved for Implementation: Nov 2013)			

(3) Description of processes to capture, assess and document information, lessons, best practice & expertise generated during project implementation

? Processes to capture, assess and document information, lessons, best practice and expertise generated during the project implementation will be targeted to identify learning needs at the project level, which will cover standardization of creating, storing and accessing the project documentation and, the nationwide learning and information sharing needs, involving ability to collate, analyze and share knowledge in a systematic manner.

? The initial step of the process will be the identification of process and team through which the KM materials will be collected. It will be important to establish the specific need and purpose for lessons,

the audience for the KM products. Initial engagement from all key players and stakeholders will be established during the inception phase of the project implementation. Project team members with specific expertise or knowledge of the project and other needed skills, such as communication and writing, will be selected. The team should then agree to KM product format (length, style, and presentation), data collection and analysis methodologies (e.g., surveys, questionnaires, workshops) and process, dissemination strategy, and other activities that will be needed.

? KM materials collection process will involve the capture of information through structured and unstructured processes such as project critiques, written forms, and meetings. The collection of KM materials may come from as many sources as the project is willing to solicit. Lessons learned can be based both upon positive experiences that achieve the project goals and on negative experiences that result in undesirable outcomes. For the project, a collaborative lessons collection process can be as or more important as documenting the KM materials.

? Further, verification and synthesizing of information and KM materials will serve to verify the accuracy and applicability of KM materials submitted. Project international and national subject matter experts may be involved in coordinating and conducting reviews to determine whether or not the KM materials (incl. lessons) are relevant across other urban areas in Georgia, are unique to this particular project, or could be applied to the country as a whole.

? The storage aspect of the KM materials, including lessons learned, will involve incorporating lessons into an electronic database for future sharing and dissemination. Information will be stored in a manner that will allow potential users to identify search lessons by keyword.

? The final element, and the most important, will be the dissemination of the KM materials since they are of little benefit unless they are distributed and used by stakeholders and other users who will benefit from them. Dissemination can include the revision of the work process, training, and routine distribution via a variety of communication media. KM materials can be ?pushed,? or automatically delivered to a user, or ?pulled? in situations where a user must manually search for them. Technically, this will be implemented through the web-based knowledge management system (in the form of a functional platform) that will be developed for information sharing, awareness-raising, dissemination and replication purposes. The web-based knowledge management system will connect cities with resources in existing tools, such as the online Climate-Smart Planning Platform, which provides a central database of more than 320 tools and datasets from 58 organizations, including user reviews. The possibility to add content and share experiences online for the registered users will increase the sense of ownership of the platform. The architecture and design of the web platform will be interactive, functional, efficient and user-friendly. This web-based tool will also serve as a communication and

exchange gateway for nature conservation, ecological living and sustainable development-oriented CSOs, general public and other stakeholders. A web-based knowledge management system will be the primary recommended database for best practices on ?Green city development concept?, including the topics related to the sustainable urban planning and management, sustainable urban transport and sustainable land management.

? Dissemination through the project website and web-based knowledge management system will be accompanied by the series of awareness-raising and demonstration meetings and events during the whole period of project implementation.

(4) Showing how to develop knowledge exchange, learning and collaboration among different stakeholders that have been selected for technology demonstrations. Consideration of knowledge platform and websites

? Knowledge exchange, learning and collaboration among different stakeholders selected for technology demonstrations will be implemented in a participatory manner with the engagement of central line ministries and agencies (Ministry of Environmental Protection and Agriculture - MEPA, Ministry of Economy and Sustainable Development -MESD, Ministry of Regional Development and Infrastructure ? MRDI, National Forest Agency ? NFA, Protected Areas Agency ? APA, Georgian National Tourism Administration ? GNTA, Municipal Development Fund of Georgia ? MDF, National Center for Disease Control and Public Health ? NCDC, Ministry of Finance - MoF) and local stakeholders (other Cities in Georgia, Local NGOs and CSOs and private sector).

? Project web-site and web-based knowledge management system (in the form of functional platform) will be developed for knowledge and information sharing, awareness-raising, dissemination and replication purposes. The web-based knowledge management system will connect cities in Georgia with urgent and/or potential needs for sustainable low carbon urban development. As it is described under Component 3 in *Alternative Scenario*, at present, stakeholders at municipal/city and national levels in Georgia are having difficulties in reaching the relevant information in terms of best practices on technology demonstrations, projects, laws, theoretical knowledge, training, organizations, etc. An interactive web-based platform will allow them to access these essential resources and help in developing networks and exchange of information.

? At least 6 stakeholder meetings and demonstration events will be organized to exhibit and validate pilot measures under Component 2 (*Output 2.1.4. Two demonstration projects: one on integrated low emission electric urban transport, connecting Kutaisi city center to Sataplia Nature Reserve and one on SLM demonstration - land and forest restoration*) and to further promote/discuss the obstacles and opportunities of nature-based solutions for sustainable urban low carbon development (*low carbon electric urban transport, sustainable land management etc.*).

? In addition, the possibility to add content and share experiences online for registered users will increase the sense of ownership of the platform.

(5) Consideration of long-term plan for strategic communications and knowledge sharing all over the country

? Along with the development of Knowledge Management (KM) Strategy and Action Plan at PPG phase, long-term plan for strategic communications and knowledge sharing at the national level will be elaborated during the project implementation period (as project implementation will progress) with the view of long term sustainability and elements of cost recovery mainly through the project web-based knowledge management system (in the form of the functional platform).

? To enhance learning, cross-disciplinary syllabus, videos, links and background reading will be included in the long-term plan for strategic communications and knowledge sharing at the national level. To increase learning impact, activities to help participants and potential users to apply the knowledge acquired to identify nature-based adaption opportunities and conduct preliminary valuations will also be included.

? The long-term plan will be promoted across global networks and platforms and much wider. It will be updated annually using the outputs from components 1, 2 and 3.

? Events will also be organised at key forums of the GEF, UN Environment, UNFCCC and UNCCD to raise awareness of on the value of knowledge sharing on nature-based solutions for sustainable urban low carbon development.

[1] Source: Knowledge Management Requirements: Enhancing Knowledge and Learning in GEF-7 Project Design and Implementation (2020). GEF Introduction Seminar 2020, Washington DC.

https://www.thegef.org/sites/default/files/events/Knowledge%20Management%20Requirements%20Jan -2020.pdf

[2] see in Art of Knowledge Exchange: A Results-Focused Planning Guide for the GEF Partnership (GEF Secretariat, 2017).

https://www.thegef.org/publications/art-knowledge-exchange-results-focused-planning-guide-gef-partnership

[3] https://www.climatesmartplanning.org

[4] https://www.thegpsc.org/about

[5] https://www.worldbank.org/en/region/eca/brief/sustainable-citiesinitiative#:~:text=The%20Sustainable%20Cities%20Initiative%20(SCI,and%20Central%20Asia%20(ECA)

[6] https://www.covenantofmayors.eu/en/

[7] https://www.ebrdgreencities.com/

[8] https://www.naturebasedsolutionsinitiative.org/

[9] https://natura-net.org/

[10]https://www.ebrd.com/cs/Satellite?c=Content&cid=1395278068866&pagename=EBRD%2FCont ent%2FContentLayout&rendermode=live%3Fsrch-pg

[11] https://www.ebrd.com/work-with-us/projects/psd/50842.html

[12] https://www.ebrd.com/work-with-us/projects/psd/green-cities-2.html

[13] https://www.ebrd.com/work-with-us/projects/psd/georgian-low-carbon-framework.html

[14] https://www.ge.undp.org/content/georgia/en/home/projects/eu4climate.html

9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

	CEO Endorsement/Approva		
PIF	1	MTR	TE

Medium/Moderate

Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

Supporting Documents

Upload available ESS supporting documents.

Title

Submitted

ESERN Georgia Kutaisi MFA signed

Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)

Position Ministry Namo Dato

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).

Name Position		u y	Dale
Ms. Nino GEF TKHILAV OPERAT A FOCAL	TIONAL PROT	STRY OF ENVIRON ECTION AND AGRI	2/5/2021

ANNEX A: Project Map and Geographic Coordinates

Please provide geo-referenced information and map where the project intervention takes place

PROGRAM/PROJECT MAP AND GEOGRAPHIC COORDINATES

(when possible)

Kutaisi is located at latitude 42.26791 and longitude 42.6945915, in the northern hemisphere.

