



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 No

NGI No

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)

Executing Partner Type

Government

GEF Focal Area

Multi Focal Area

Taxonomy

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

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 2

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

12/21/2021

Expected Implementation Start

1/1/2022

Expected Completion Date

12/31/2024

Duration

48In Months

Agency Fee(\$)

142,935.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
CCM-1-2	Quantifiable and verifiable tons of CO2e mitigated through actions for development of low-carbon transport options to cover investments from alternative fuel vehicles and fuel-efficient vehicles to bus-rapid-transit and bicycle sharing programs and to reduce barriers for adoption of electric mobility and significant reduction of local air pollution through electric drive technologies.	GET	1,326,550.00	8,623,800.00

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
LD-1-4	<p>Pressures are reduced on natural resources from competing land uses and increase resilience in the wider landscape; Integrated landscape management and restoration addresses the physical, biological and socio-economic aspects of the processes of land degradation, with specific attention to deforestation to maximize the delivery of multiple benefits to invest in the management of landscape across sectors and across administrative boundaries in the context of sustainable development and to scale up SLM practices and the restoration of landscapes on quantifiable and verifiable hectares of landscapes (excluding protected areas).</p>	GET	178,041.00	6,850,000.00
Total Project Cost(\$)			1,504,591.00	15,473,800.00

B. Project description summary

Project Objective

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 Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
1. Strengthening planning and institutional framework enabling sustainable development in the City of Kutaisi	Technical Assistance	<p>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[1]</p> <p>[1] 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).</p>	<p>1.1. Municipal development policies that lead to development of integrated land-use or other urban development plan for Kutaisi[1]</p> <p>1.2. Low Emission Development Strategy (LEDS) and Integrated Sustainable Urban Mobility Plan (ISUMP) for Kutaisi city[2]</p> <p>1.3. Land degradation hot spots, trends and drivers around Kutaisi mapped and disseminated to Kutaisi municipality</p> <p>1.4 Improved communication with Sataplia Nature Reserve[3]</p> <p>1.5 Capacity development and technical support[4]</p> <p>[1] These would be based on an 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 implementation of the Spatial Planning, Architectural and Building Code (2018) and Rules for</p>	GET	442,660.00	3,800,200.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
2. Facilitating investment in low emission electric public transportation and green city development - Technical Assistance (40%) Investment (60%)	Investment	<p>2. Economic and technical feasibility of integrated municipal projects (green public transport and green urban development) have been demonstrated in Kutaisi[1]</p> <p>Breakdown of the GEF Project Financing:</p> <p>by Financing Type: TA: 251,820 (%40); INV: 377,730 (60%)</p> <p>by Outputs:</p> <p>TA:</p> <p>Output 2.1 - 61,820</p> <p>Output 2.1 - 50,000</p> <p>Output 2.3 - 40,000</p> <p>Output 2.4 ? 100,000</p> <p>INV:</p> <p>Output 2.4 - 377,730</p> <p>[1] This is in support of low emission development and LDN and similar integrated municipal projects replicated in similar sites in Kutaisi, notably for 700 ha of Land under SLM around Sataplia Nature Reserve and 163,800 tCO_{2eq} mitigated directly (3.276 million tCO₂ - mitigated over the</p>	<p>2.1 Needs assessment and resource mobilization strategy/plan for Kutaisi Low emission electric urban transportation and green city development</p> <p>2.2 Economic and financial analysis and design of low emission electric public transportation solutions of identified Kutaisi City to Sataplia Nature Reserve corridor[1]</p> <p>2.3 A GCF concept note for scale-up of low-carbon transport in Kutaisi[2]</p> <p>2.4 At least 2 operational demonstration projects[3]</p> <p>[1] These analyses and investment needs are to be assessed and disseminated to policymakers</p> <p>[2] This concept note will be developed on the basis of feasibility studies and analysis.</p> <p>[3] These demonstration project will be implemented within the sustainably managed Sataplia Nature Reserve and Kutaisi municipality: 1 integrated low emission electric urban transport, connecting Kutaisi city center to Sataplia Nature Reserve. to increase</p>	GE	629,550.00	7,718,729.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing(\$)	Confirmed Co-Financing(\$)
3. Capacity development, knowledge management and M&E for integrated low carbon city development	Technical Assistance	3. The practitioners of Kutaisi apply the new knowledge and increased capacity on low-carbon electric public transport and sustainable land management[1] [1] The practitioners are the Kutaisi City local authorities, neighbouring municipalities in Imereti Region, and stakeholders (local private sector representatives, NGOs and CSOs). This was measured by the increased score in the Capacity Development Scorecard for Kutaisi City. Baseline and targets were established during the PPG phase.	3.1. Capacity needs assessment development plan 3.2 At least 200 key actors from the public and private sectors demonstrate increased knowledge and capacity on low carbon electric urban transport and sustainable land management 3.3 User friendly knowledge management and awareness raising system under a Kutaisi City website[1] [1] To be made available for local decision makers and for the general public.	GET	245,600.00	2,033,944.00
Monitoring and Evaluation				GET	50,000.00	514,219.00
Sub Total (\$)					1,367,810.00	14,067,092.00

Project Management Cost (PMC)

Project Management Cost (PMC)

GET	136,781.00	1,406,708.00
Sub Total(\$)	136,781.00	1,406,708.00
Total Project Cost(\$)	1,504,591.00	15,473,800.00

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

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	620,000.00
GEF Agency	UNEP	Grant	Investment mobilized	2,800,000.00
Total Co-Financing(\$)				15,473,800.00

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\$ 1,520,000 USD co-financing. Out of 1,400,000 USD co-financing, in-kind contribution in amount of 900,000 USD will be provided during the project implementation period in a form of voluntary labor, donation of meeting and office premises of the organisation, free use of vehicles and equipment. In the frame of four ongoing projects grants with total amount of 620,000 USD will be provided throughout the following projects: (a) "Long-Term Low Emission Development Strategy of Georgia". The overall goal of this Project is to assist UNDP and the Ministry of Environmental Protection and Agriculture of Georgia (MEPA) in developing mid-century (long-term) gender-sensitive low emission development strategy (LT? LEDS) of Georgia aiming at supporting the country to fulfil the commitment taken under the Paris Agreement on Climate Change and assisting in environmentally sound, low-carbon and climate-wise long-term planning in the following

sectors: Energy, Buildings, Transport, Industry (IPPU), Agriculture, Land-Use, Land-Use Change and Forestry (LULUCF) and Waste. In the frame of EU/UNDP project REC Caucasus will be using the co-financing of 153,000 USD to develop a visionary policy document for Kutaisi city with strong technical foundations, which will set current state of municipal affairs and identify the most plausible long-term trajectories and pathways for low emission development and decarbonization of the identified and prioritized sectors, taking into account the provision of "Long-Term Low Emission Development Strategy of Georgia"; (b) ?Climate Change Adaptation Service Provider of Development of Demo Plots, Training and Situation Analysis in 3 regions (Imereti, Samegrelo-Zemosvaneti, Samtskhe- Javakheti)?. The Dairy Modernisation and Market Access (DiMMA) Programme, co-funded by the Government of Georgia, the International Fund for Agricultural Development (IFAD) and the Adaptation Fund (AF), aims at regional economic development and poverty reduction by contributing to the modernization and emergence of a competitive, diversified, resilient and sustainable agricultural industry in Georgia. The Programme is expected to enhance the livelihoods and resilience of smallholders, improve the management of the natural resources and reduce the vulnerability to the negative impacts of climate change. The two projects complement each other geographically and thematically and will be implemented in the Imereti region. Complementarities between GEF project looking at biophysical solutions targeting land degradation neutrality and the focus of the IFAD project at climate resilience and nature based development are strong assets for both projects. REC Caucasus will allocate 350,000 USD as part of co-financing for upscaling the of SLM/LDN based forest/land management in Kutaisi municipality; (c) ?Climate Change (Nationally Determined Contributions, Climate Action Plan, Low-Emission Development Strategy)Communication Strategy, Awareness Raising Action Plan and Public Outreach Campaign)?. The overall goal of the EU funded assignment is to assist UNDP and the Ministry of Environmental Protection and Agriculture of Georgia in developing a communication strategy and a public awareness raising plan to enhance general awareness of climate change related challenges, national obligations and contribution potential and promote the concepts of climate change mitigation and adaptation in Georgia. The project will establish close cooperation and make synergies with GEF project with the following work: awareness raising and communication activities for local population and other stakeholders on low-carbon development and sustainable land management. Special attention will be given to innovative low-emission public transport system development and nature based spatial planning. In the frame of EU/UNDP project REC Caucasus will be using the co-financing of 55,000 USD to organize a public outreach campaign, and plan respective awareness raising activities; (d) ADB project ?TA-9740 GEO: Preparing Integrated Solutions for Livable Cities? The Livable Cities Investment Project for Balanced Development is sector loan project of ADB for a total loan amount of USD 120 million that will improve livability and inclusive economic growth in the regions in Georgia, including Kutaisi city. The transaction technical assistance facility (TA facility) will support project preparation to ensuing sustainable urban development component and empowerment of the capacities of municipalities, Assist in the preparation of development and infrastructure projects, coordinate with local stakeholders (CSOs, IFIs and local activists). Developed the strategy for sustainable urban development to improve the quality of life of local people in the regions with inclusive and climate-resilient urban infrastructure and services, improved accessibility, connectivity and economic competitiveness, and enhanced institutional capacity. In the frame of ADB project REC Caucasus will provide the co-financing of 250,000 USD to undertake the capacity needs assessment and plan a training

program dedicated to Integrated Solutions for Livable Cities with the specific focus on with inclusive and climate-resilient urban development. UNEP will provide \$2.8million grant co-finance. The investment mobilized by UNEP will be from UNEP's "EU4Environment: Sustainable Public Procurement in Georgia" and "Building capacity to advance the National Adaptation Plan Process in Georgia" Projects. These Projects are expected to start in 2022. Sustainable Procurement Project will enhance the municipality's capacity in adopting sustainability criteria in public tenders. National Adaptation capacity project will support Component 2. The project will strengthen the technical and institutional capacity of public institutions in the pilot region, vulnerable groups and relevant stakeholders to implement the adaptation process. The project will enhance the management, acquisition and dissemination of climate change data and information.

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

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Georgia	Climate Change	CC STAR Allocation	1,326,550	126,022	1,452,572.00
UNEP	GET	Georgia	Land Degradation	LD STAR Allocation	178,041	16,913	194,954.00
Total Grant Resources(\$)					1,504,591.00	142,935.00	1,647,526.00

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount (\$)

45,664

PPG Agency Fee (\$)

4,336

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNEP	GET	Georgia	Climate Change	CC STAR Allocation	38,053	3,614	
UNEP	GET	Georgia	Land Degradation	LD STAR Allocation	7,611	722	
Total Project Costs(\$)					45,664.00	4,336.00	50,000.00

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	700.00	0.00	0.00

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
220.00	220.00		

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

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

Type/Name of Third Party Certification

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

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at 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	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 ₂ e (direct)	100000	163800	0	0
Expected metric tons of CO ₂ e (indirect)	2396695	1506868	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 ₂ e (direct)	100,000			
Expected metric tons of CO ₂ 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 ₂ e (direct)		163,800		
Expected metric tons of CO ₂ e (indirect)	2,396,695	1,506,868		
Anticipated start year of accounting	2021	2025		
Duration of accounting	20	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	44,824,320		

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)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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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	28,000		
Male	26,000	26,000		
Total	54080	54000	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

Part II. Project Justification

1a. Project Description

describe any changes in alignment with the project design with the original pif

1. Work carried out during the PPG phase was aimed at complementing information and validating the assumptions underlying the Project Identification Form (PIF), as well as further engagement with project counterparts. PPG work started in the first half of 2021 during the still ongoing COVID-19 pandemic. Two workshops (*Inception and Validation*) to develop the problem tree and results framework was conducted consequently in March and August of 2021 with participation of key governmental counterparts. Meetings were held with Kutaisi City authorities and Ministry of Environmental Protection and Agriculture of Georgia (MEPA) to discuss activities to avoid overlaps and coordinate support for PPG work. Project key indicators for CO2 emissions reduction were recalculated based on changed baseline for 2021.

2. Barriers noted at the PIF stage remain unchanged, but the statement of the problem, the project's theory of change have been further elaborated and made more context-specific, with direct linkages of root causes and barriers to proposed activities, outputs, and outcomes.

IN PIF	IN CEO ENDORSEMENT REQUEST	REASON FOR CHANGE
Outcome 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 efficiency related 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 CSO and private sector)	Outcome 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	The explanation on the outcome has been moved to the footnote.

IN PIF	IN CEO ENDORSEMENT REQUEST	REASON FOR CHANGE
<p>Output 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 implementation of the Spatial Planning, Architectural and Building Code (2018) and Rules for Development of Spatial and Urban Plans (2019)]</p>	<p>Output 1.1. Municipal development policies that lead to development of integrated land-use or other urban development plan for Kutaisi</p>	<p>The explanation on the output has been moved to the footnote</p>
<p>Output 1.1.2. Low Emission Development Strategy for Kutaisi city prepared considering national low carbon, green growth, and sustainable development priorities and reviewed by Kutaisi Municipality</p>	<p>Output 1.2. Low Emission Development Strategy (LEDS) and Integrated Sustainable Urban Mobility Plan (ISUMP) for Kutaisi city</p>	<p>The explanation on the output has been moved to the footnote</p> <p>Integrated Sustainable Urban Mobility Plan (ISUMP) has been added to Output 1.2. due to highlighted demand from stakeholders during the PPG phase and consequent increase in GEF financing for the project</p>
<p>Output 1.1.4 Opportunities to better connect Sataplia Nature Reserve with Kutaisi identified and presented to decision makers of the municipality</p>	<p>Output 1.4 Improved communication with Sataplia Nature Reserve</p>	<p>Explanation of the output has been clarified and placed in footnote</p>
<p>Output 1.1.5 Capacity development and technical support provided for policy engagement, partnership formation and coordination mechanisms in a gender-sensitive manner for policy and decision makers</p>	<p>Output 1.5 Capacity development and technical support</p>	<p>The explanation on the output has been moved to the footnote</p>

IN PIF	IN CEO ENDORSEMENT REQUEST	REASON FOR CHANGE
<p>Outcome 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.</p> <p><i>[700 ha of Land under SLM around Sataplia Nature Reserve]</i></p> <p><i>[2.40 million metric tons CO2 eq. mitigated]</i></p> <p>This outcome will be implemented in participatory planning manner with 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)</p>	<p>Outcome 2. Economic and technical feasibility of integrated municipal projects (green public transport and green urban development) have been demonstrated in Kutaisi</p>	<p>The explanation on the outcome has been moved to the footnote</p>
<p>Output 2.1.1 Low emission electric urban transportation and green city development needs assessed, and resource mobilization strategy/plan elaborated by Kutaisi municipality</p>	<p>Output 2.1 Needs assessment and resource mobilization strategy/plan for Kutaisi Low emission electric urban transportation and green city development</p>	<p>Action has been clarified in terms of an output</p>

IN PIF	IN CEO ENDORSEMENT REQUEST	REASON FOR CHANGE
Output 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	Output 2.2 Economic and financial analysis and design of low emission electric public transportation solutions of identified Kutaisi City to Sataplia Nature Reserve corridor	Action has been clarified in terms of an output and placed into the footnote
Output 2.1.3. A GCF concept note to scale up low-carbon transport in Kutaisi is developed based on the feasibility studies and analysis	Output 2.3 A GCF concept note for scale-up of low-carbon transport in Kutaisi	The explanation on the output has been moved to the footnote
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	Output 2.4 At least 2 operational demonstration projects	The explanation on the output has been moved to the footnote
<p>Outcome 3.1 The practitioners of Kutaisi (Kutaisi City local authorities, neighbouring municipalities in Imereti 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</p> <p><i>[Increased score in the Capacity Development Scorecard for Kutaisi City] [Baseline and targets will be established during the PPG phase]</i></p>	Outcome 3. The practitioners of Kutaisi apply the new knowledge and increased capacity on low-carbon electric public transport and sustainable land management	The explanation on the outcome has been moved to the footnote

IN PIF	IN CEO ENDORSEMENT REQUEST	REASON FOR CHANGE
Output 3.1.1 Capacity needs assessment and capacity development plan prepared	Output 3.1. Capacity needs assessment development plan	Action has been clarified in terms of an output
Output 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	Output 3.3 User friendly knowledge management and awareness raising system under a Kutaisi City website	The explanation on the output has been moved to the footnote
GEF Project Financing	Total GEF Project Financing: \$1,050,230	<p>Total Project costs for Total GEF Project Financing have been increased to \$1,504,591.90.</p> <p>Amount of GEF Project Financing for each component has been calculated based on its proportional share in PIF GEF Project Financing</p>

1a. Project Description. *Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description); 2) the baseline scenario and any associated baseline projects; 3) the proposed alternative scenario with a brief description of expected outcomes and components of the project; 4) alignment with GEF focal area and/or Impact Program strategies; 5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 7) innovativeness, sustainability and potential for scaling up. ?*

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

3. Urban development in Georgia, as is the case practically of all former post-Soviet countries is characterized by basic public infrastructure and services universally covering urban areas. 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 (i.e. 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, reliability, efficiency of resources use and environmental sustainability.

4. 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 and urban infrastructure (i.e. *infrastructure for public transport, highways, intercity and city roads, streets, urban green areas, water supply and sewage systems*) 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.

5. Urban transport has been the primary driver for increased GHG emissions totaling 60% out of total GHG emissions for all sectors since 2012. 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. Road maintenance and upgrade are effective actions to reduce emissions from road transport.

6. 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, equivalent of replacing 6 million internal combustion cars with zero-emission cars. 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 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.

7. The City of Kutaisi and vicinity have the following attributes:

? Kutaisi is Georgia's second largest city with the population of near 135,200 people[1]¹ as of January 2020 of which 70,200 women (52%) and 65,000 men (48%)[2]². It is the center of Imereti region, which involves 11 municipalities, including City of Kutaisi;

? The city's current tourism development program[3]³ 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 with an exceptional opportunity for developing adventure travel and ecotourism. To the east and northeast, Kutaisi is bounded by the Northern Imereti Foothills, to the north by the Samguruli 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, the Colhic Forest 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 convenient access to Sataplia Nature Reserve;

? The economy of Kutaisi before the 90s of last century had been mainly based on large-scale manufacturing sector (i.e. manufacturing of trucks, tractors, fabricated metal products, machinery and equipment, chemical products, aircraft repairing), employing 55,000 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[4]⁴. Today, the manufacturing industry is not the main driving force of Kutaisi's economy, as evidenced in 2018 when 39% of the employed population in Kutaisi worked in the trade and services sectors, followed by 18% in education and sports, 10% in health care and only 11% in manufacturing;

? In 2019, the Kutaisi City Local Economic Development Plan (LEDP) for 2019-2020[5]⁵ was approved on the basis of the EU's "Mayors for Economic Growth" Initiative (M4EG)[6]⁶ methodology. 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 utilizes the tourist potential of Imereti Region, and its ancient historical and cultural heritage, and diverse nature. In terms of tourism, the city has the potential to become a regional management center which will in turn, enhance visibility and increase the number of visitors and revenues in the tourism sector;

? Kutaisi City, with its landscape and climatic conditions, also 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;

? Kutaisi is located close to major seaports of Batumi (130 km) and Poti (102 km);

? Kutaisi has an international airport. More than 600,000 travellers have been using its services during the years of 2014-2017 since its opening with the number of travellers increasing to 627,600 and 873,600 in 2018 and 2019 respectively. According to the International Council of Airports (ACI

Europe) reports[7]⁷, the airport of Kutaisi is one of the leading airports across Europe in terms of the growth of passengers;

? 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 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[8]⁸ of Kutaisi identified the following key challenges and vulnerabilities:

- o *Natural disasters* amongst which hurricanes have the most impact for Kutaisi;
- o *Transport and transport infrastructure* due to the poor planning and organization of the public transport, and the significant increase in the number of privately owned vehicles, many of which are imported as second-hand vehicles, further aggravating air pollution and GHG emissions.

GHG emissions from transport in Kutaisi

8. According to the 3rd National Communication of Georgia to UNFCCC and Georgia?s Second Biennial Update Report[9]⁹, 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 (see Table 1). In the transport sector, 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 in 2019.

Table 1: Greenhouse gas emissions in Kutaisi in 2019

Source	GHG emissions (tCO ₂ eq)
Transport	262,069
Buildings	145,693
Street Lighting	1,604
Waste	28,350
Total	437,717

9. 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.

10. According to Kutaisi City Administration, about 35 million passengers were carried by public transport in 2019. The fleet consists of 67 old buses and 160 old minibuses. There are no incentives for introducing hybrid or electric vehicles or for converting diesel buses to dual fuel diesel/compressed natural gas (CNG) buses. 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 over 650

private taxis, most of which are older than 10 years) is making the transition to eco-friendly modes of transport difficult.

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

11. A certain amount of GHG emissions come from land use changes and land degradation[10]¹⁰. According to Kutaisi climate change adaptation and mitigation paper (2016), elaborated by the Georgian National Association of Local Authorities (NALAG), with support of USAID[11]¹¹, the most acute land-related problem is land wind erosion, mainly due to poor land management practices such as the conversion of forested areas to built-up areas (settlement, commercial areas). 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.

12. Kutaisi is categorized as an environmentally highly sensitive area due to forest cover within the Kutaisi city boundaries. The major forested area is the 480 ha Sagoria Forest, 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 (i.e., air and water pollution, climate change impacts, environmental hazards, floods and landslides).

13. 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 a severe nationwide 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

14. The long-term solution to aforementioned challenges is a transformative shift towards integrated sustainable urban development in Kutaisi city. However, there are barriers preventing resolution of these challenges as described in the following paras.

15. *Weak planning and institutional framework and capacities for integrated sustainable urban development in Kutaisi.* 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. Despite a strong interest in sustainable urban development, and sustainable transport, the City of Kutaisi does not have a consistent policy on sustainable transport, which should integrate land use, urban planning, traffic management, and intelligent transport systems. Furthermore, 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. In addition, the administration 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. Although SEAP 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.

16. 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. For Kutaisi to adopt sustainable urban transportation, evidence from demonstrations is needed.

17. 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 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 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'). The GCAP methodology takes a systematic approach to identify, benchmark, prioritize and guide green city actions by cities. Kutaisi City may benefit from this initiative by adopting and integrating green city development approaches in SLM based land use planning and implementation.

18. Sataplia Nature Reserve, one of the oldest nature reserves of Georgia, is just 10 km away but public transportation is limited, thereby preventing Kutaisi residents from benefitting and acknowledging the role and importance of sustainable use of this nature reserve for urban life without threatening its conservation values.

19. *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 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.

20. With over 57 per cent of Georgia's population living in cities, there is a lack of awareness in Kutaisi amongst the general public of the benefits of energy saving in the transport sector or in public infrastructure 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. With most traffic concentrated in urban areas, urban transport in Kutaisi will continue to grow as the major energy consumer, driven by the rapid increase in the number of private vehicles, at the expense of less carbon-intensive public transport. With the quality of public transport and related services in Kutaisi continuing to 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

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2) The baseline scenario and any associated baseline projects

21. 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[12]¹². 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. The latest plan was developed for the period of 1975-2025 with view of an assumed population of 450,000-750,000 for 2025[13]¹³.

22. During the first decade after independence from the Soviet Union (1991-2001), the main focus of land reform in Georgia was privatizing land, registering it and taxing it. However, there were no significant policy and legislative changes between 2001 and 2018. As part of the new wave of 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 a new Spatial Planning, Architectural and Building Code[14]¹⁴ which replaced the Spatial Planning and Building Act of 2005. This 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 aforementioned 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*) as shown on Table 2 below.

23. Currently, city master plans for the use and development of urban land exist for three of Georgia's large cities (Tbilisi, Batumi, Zugdidi) and a number of small touristic resort towns and settlements. However, zoning maps, without having entire City Master Plans and separately from City Master Plans, have also been drawn up for some cities including Kutaisi. The rest of the country's cities and towns still await plans. 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[15]¹⁵.

Table 2: Hierarchy of city plans based on 2018 Spatial Planning, Architectural and Building Code

		Local Level
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Plan Category	National Level	District Level	City Level	Urban Settlement Level
Spatial Plan	National Spatial Plan			
Spatial Plan / Urban Plan		District Spatial Plan	City Master Plan ^[16]	
Urban Plan			City Housing Plan	Urban Settlement Housing Plan
Urban Plan			City Unit Detailed Housing Plan	Urban Settlement Detailed Housing Plan

24. The local level of government makes all land use decisions in Kutaisi. Since all 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.

25. In 2016, Kutaisi developed a zoning map (as shown on Figure 3), however, without a city master plan. In this regard, and according to Spatial Planning, Architectural and Building Code of 2018, all spatial and urban planning documents that were adopted before 2018, are to maintain their legal force until they are replaced by plans developed and adopted in line with new Code of 2018.

26. Since 2021 Kutaisi has started to develop City Master Plan (also known as ?City General Plan?). For that purpose, about USD 130,000 was allocated under Kutaisi City Budget of 2020^[17] within the special budgetary program^[18] for (a) primary data gathering and analyses for drafting of Development Vision for Kutaisi City; and (b) based on the Development Vision, preparation of Terms of Reference (ToR) for elaboration of Kutaisi City Master Plan. Completion of these tasks (Phase I) is foreseen in 2021 by a consortium headed by GIS and RS Consulting Center "GeoGraphic"^[19]. Thus far, Phase I works completed include:

- ? Primary data gathering and analyses for drafting of Development Vision accompanied with sectoral research and analyses on different topics; and
- ? Elaboration of Development Vision/Strategy for 2040.

27. Procurement of services for development of Kutaisi City Master Plan (Phase II) is planned upon formal approval of the Development Vision for the City and related ToR (in the second half of 2021) so

that development of City Master Plan and its legal endorsement process is fully completed not later than in the first half of 2023. It is supposed that during the implementation of Phase II (development of Kutaisi City Master Plan) it would be possible to elaborate number of thematic and sectoral plans (e.g., *detailed housing plans, transport plan, parking plan, greening plan etc.*) along with Master Plan itself.

Kutaisi City Development Vision/Strategy for 2040

28. The Development Vision has been developed for the period up to 2040, based on 4 strategic goals: Gateway to Europe, Center of West Georgia, City of Knowledge Synergy and Ecocity. The strategic goal "Ecocity" covers carbon neutrality, climate change mitigation and adaptation, environmental sound management of waste, and green growth and green economy (further elaborated in Annex T). The scheme of proposed the Development Vision for Kutaisi City is provided on Figures 1, 2 and 3, and Table 3[20]²⁰.

29.

Figure 1: Development Vision for Kutaisi City



Figure 2: Map of proposed city centers

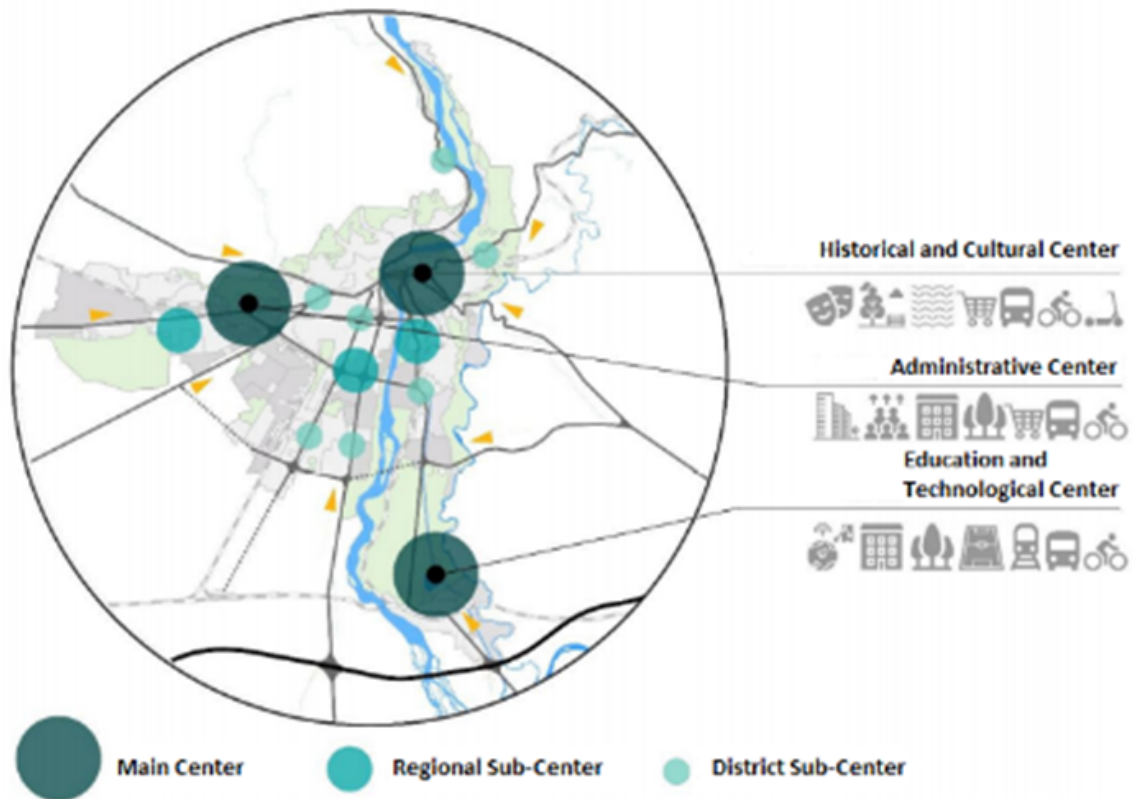
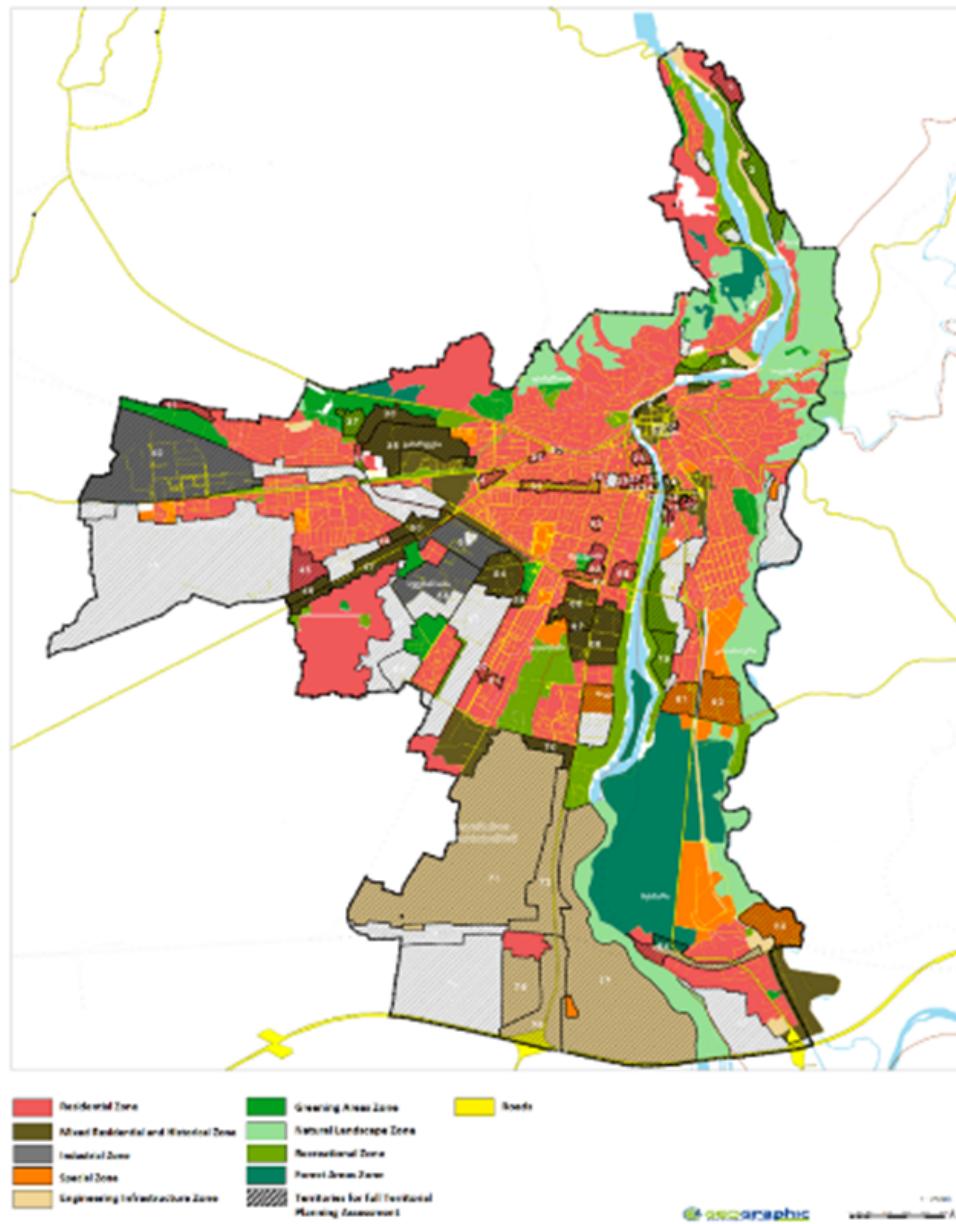


Table 3: Kutaisi City Development Vision/Strategy for 2040 Document[21]²¹

<i>Title</i>	<i>(ha)</i>	<i>%</i>
Residential Zone	2,297	27.5
Mixed Residential and Historical Zone	515	6.2
Industrial Zone	210	2.5
Special Zone for Development of Universities? and Technological Centres? Infrastructure	189	2.3
Recreational Zone	449	5.4
Greening Areas Zone	191	2.3
Natural-Landscape Zone	623	7.5
Forest Areas Zone	478	5.7
Engineering Infrastructure Zone	70	0.8
Transport Infrastructure Zone (Roads)	453	5.4
Territories for full Territorial Planning Assessment	2,879	34.5
Total	8,354	100

Figure 3: City zoning map with new zoning plan



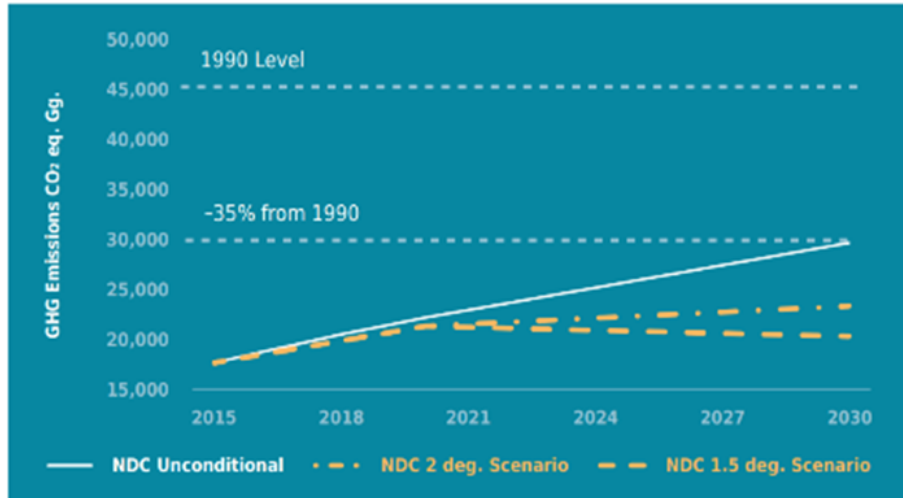
Local Sustainable Energy and Climate Change Planning Framework

30. Kutaisi city has committed to reducing GHG emissions by 30% 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. Georgia's officially submitted nationally determined contributions (NDC) communicates Georgia's intention to reduce greenhouse gas (GHG) emissions by at least 35% below the level of 1990 by 2030. Other Government of Georgia's national climate change policy and planning framework includes its Georgia's Updated Nationally Determined Contribution (NDC)^[22], Georgia's 2030 Climate Change Strategy^[23] and Action Plan for 2021-2023 of the

Georgia's 2030 Climate Change Strategy[24]²⁴ ? all approved in April, 2021. Methodology applied on projections for emissions trajectory up to 2030 has been provided by analysis of trends of BAU scenario developed in Georgia's CSAP[25]²⁵ for the period up to 2030 and updated calculations by Kutaisi City and data in latest Georgia's Second Biennial Update Report[26]²⁶ and Draft National Sustainable Energy Action Plan[27]²⁷ of Georgia prepared for 2018-2030.

31. In September 2021, Georgia submitted its updated NDC[28]²⁸ to the UNFCCC. According to the NDC, Georgia plans to unconditionally reduce its GHG emissions by 35% below the GHG emissions level of 1990 by 2030, which can be increased up to 57% if the country has access to low-cost financial resources and technology. This is equal to a reduction of emission intensity per unit of GDP by approximately 38-46% from 2015 to 2030. 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. Figure 4 shows the Georgia's national GHG emission projections pursuant to the updated NDC.

Figure 4: GHG Emission Projections from Georgia



32. 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, and improvement in parking policy. The City had planned to spend more than US\$6 million during 2015-2020 to implement priority measures envisaged by its latest SEAP, however only 35-40% has been spent out of the above planned amount.

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

- ? the emissions based on BAU scenario that are 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 27% comparing to the BAU scenario, while the building sector has a capacity to reduce emissions about 21%, and street lighting and waste sectors are projected to overcome 50% emission reductions.

Results of the above projections for emissions trajectory up to 2030 for urban and transport GHG emissions projection in Kutaisi are shown in Figures 5 to 6 below.

34. The transport planning process is limited to drawing of city scheme for public transport routes (see Figure 7) and estimations of the passenger turn-over. According to Kutaisi City Administration, this baseline provided for US\$7 million for last 3 years (2018-2020) for maintenance and operational

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

35. *Parking plan.* In February 2019, the City updated its Parking Plan[29]²⁹ providing overall for 4.5 ha of parking places. Existing parking plan will be updated in accordance with the planned City Master Plan.

Figure 5: Urban GHG Emissions distribution according to sectors in 2030 in Kutaisi: 2030 (baseline scenario)

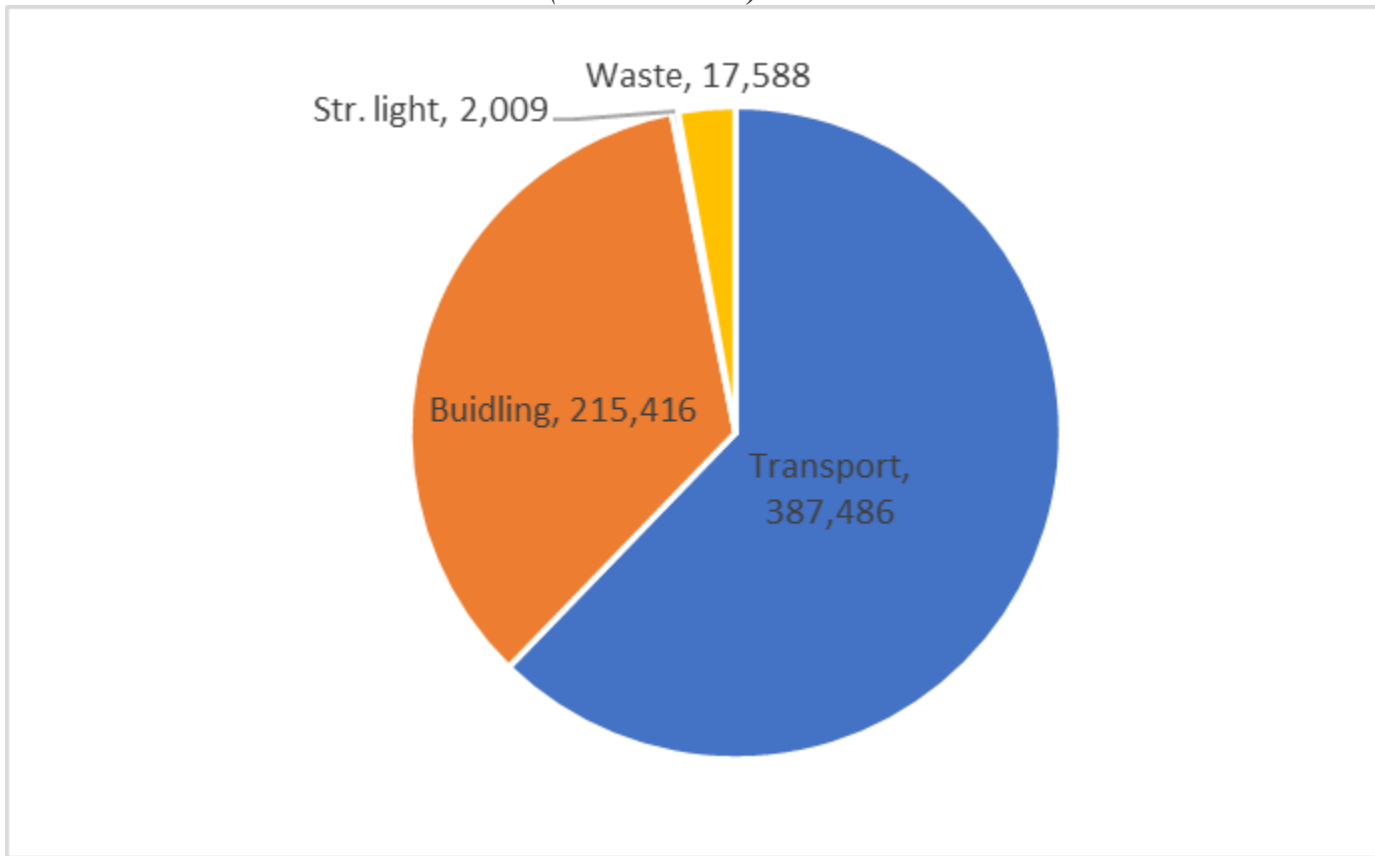


Figure 6: Kutaisi Emissions in Transport Sector in 2020 and 2030 BAU scenarios and 2030 Projection (t CO2)

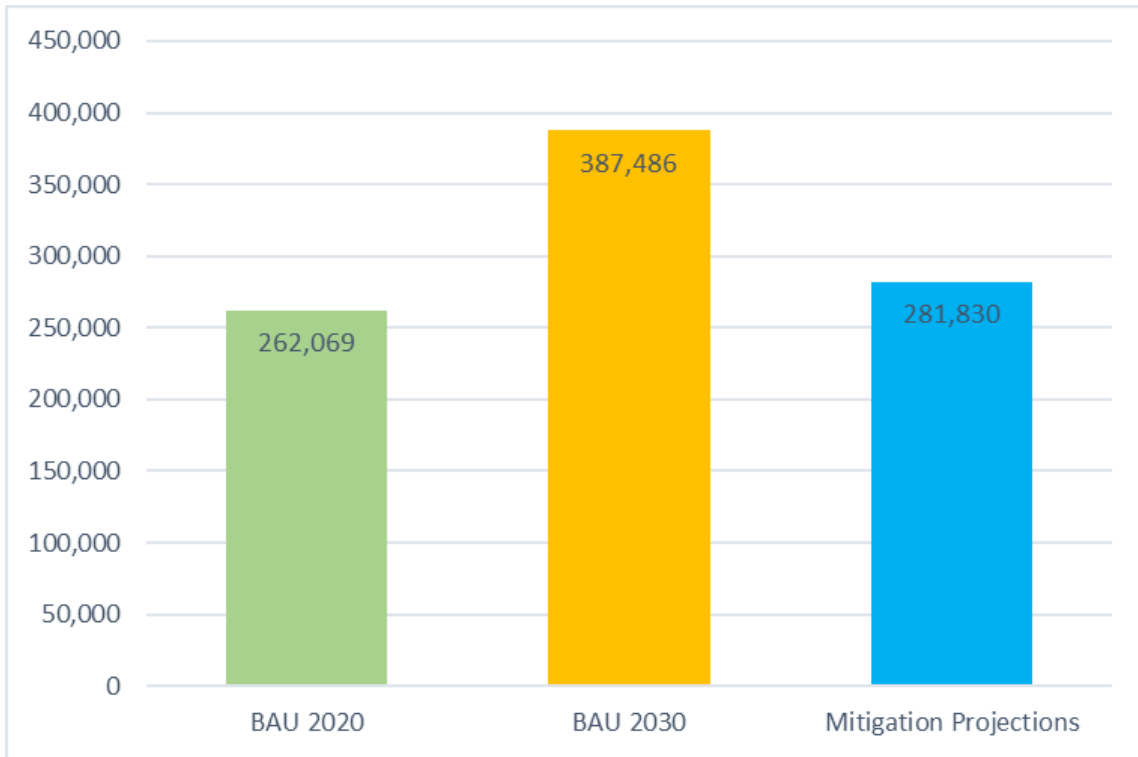


Figure 7: City scheme showing public transport routes as of 2020[30]³⁰



Legend

	Recreational Area
	Residential Area
	Forest Area
	Railway
	Existing Public Transport Routes
	Planned Public Transport Routes
	River

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

36. Regarding green space development (442.8 ha in total not including 700 ha of forest area)[31]³¹, the state of Kutaisi environment has been significantly worsening during the past 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 commonly observed species involves sycamore (*platanus*), aspen, zelkova,

cedar, cypress, willow, and palm. The majority of trees were planted in the 1950s and 60s. A comprehensive inventory of these plantings has not been conducted and data available for today is not precise.

37. One of the examples of land and urban nature degradation hotspots is *Saghoria Forest* - part of total 700 ha of forest area of Kutaisi City. *Saghoria Forest* with an area of about 65 ha (0.65 km²) is a historic oak grove at the southern edge of the Kutaisi city. The grove is located at the south-eastern border of the city and is stretched in a north-south direction. The north-south road passes through the center of the grove, which connects the town lying in the north with the highway running about 2 km from the southern border. At eastern border of the grove, a channel flows, bringing water to the power plant, Stribute. The age of the vast majority of trees is estimated at 180-200 years, which is approximately half of the life cycle of oaks. There have been visible changes in the grove structure for several years. The vast majority of the stand is *Quercus robur ssp. Imeretina* (Imeretian Oak), which is on the "Red List of Endangered Species of Georgia" and is also on the Red List of IUCN Threatened Species in the "vulnerable" category. The grove has not only far-reaching historical significance for the city, but also a cultural and social impact. It is used for weekend recreation of the city's inhabitants and forms the recreational background of the university campus. The structure of the grove has been changing for several years. In several places, cleanings began to form around the drying trees. Part of the public is of the opinion that the cause is an excessive amount of groundwater, which is said to be subsidized by emissions from an industrial agglomeration about 30 km southeast of Kutaisi, etc. However, there may be more causes, but accurate and reliable data are needed for serious conclusion - namely, analyses of the current and historical availability of water, its scarcity or its surplus, pollution and its influence on land/soil degradation, for the existing oak forest. Sataplia Nature Reserve is located in Tskaltubo municipality (*the round-trip from Kutaisi City Center to Sataplia Nature Reserve is about 20 km*), Imereti region, where the footprints of Herbivorous and Raptor dinosaurs of different epochs are found. Sataplia dinosaurs are called "Satapliazaurus" and are different from European dinosaurs.

38. Sataplia Reserve was legally established in 1935 to protect recently discovered for that time karst cave with exotic stalactites and stalagmites as well Colchian forest, geological and archaeological sites. Reserve was expanded to its present borders in 1957. In 2010 and 2011 the Sataplia Reserve was developed to accommodate tourists: visitor centre was built, a coffee house in the middle of the Reserve, a small museum, a small Reserve with dinosaur models and glass observation deck built above the cliff. Furthermore, the main karst cave was equipped with lighting effects and a secure footpath. It offers unforgettable and memorable trip to discover hidden secrets of nature. Easy pedestrian tourist routes are convenient for family travel and provide an opportunity to visit the conservation building of dinosaur footprints, exhibition hall, unique karst caves, Colchic Forest and the wild bee habitat area. A beautiful view of Imereti region overlooks from the glass panoramic construction. Of the total area of 350 ha, 348 ha are covered with forests. Relief of the landscape is mountainous. The reservation features a crater of an extinct volcano, a site of remains of a man of the Stone Age and fossilized traces of dinosaurs. The largest cave of Sataplia was discovered in 1925 and is about 900 m long. Currently, tourism revenues are increasing very fast and represent a big share

in the total budget of all protected areas of Georgia since Sataplia Nature Reserve is charging fees for visitation.

Other projects, strategies, plans and initiatives

39. The following strategies, plans and initiatives comprise the baseline for this GEF-funded Project: 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), the National Programme for Regional Development 2018-2021, and the National Initiative on Energy Performance of Buildings. The projects described in the following paras also contribute to the proposed Project's baseline.

40. **Climate Change Strategy for 2030^[32] and its Action Plan for 2021-2023^[33]**³². Georgia became a party to the Energy Community Treaty on July 2017 by adopting legally binding commitments to adopt core EU energy legislation or the "*acquis communautaire*", and Georgia's National Action Programme to Combat Desertification (NAP) that aims at integrating the aspects of the NAP into sectoral and investment planning and policy documents. These and other Government of Georgia national climate change policy and planning frameworks can be found described in more detail in 7 (*Consistency with National Priorities*).

41. **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.

42. **EBRD's Initiative Green Cities Georgia^[34]**³⁴. The EBRD is working on 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[35]³⁵. 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 25 million including 6 cities for 175 modern diesel (Euro 5) buses. The allocation for Kutaisi is to be USD 8.5 million for 60 buses. Final agreement with EBRD was reached in September 2020 with the supply of buses are expected in a phased manner during 2021-2022.

43. ***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)[36]³⁶. The CBIT has three aims: (i) Strengthen national institutions for transparency-related activities in line with national priorities; (ii) Provide relevant tools, training, and assistance for meeting the provisions stipulated in Article 13 of the Agreement; and (iii) 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 (UNFCCC). 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.

44. ***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 (*including 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.

45. ***Georgia's National State Programs related to Sustainable Land Management and Sustainable Forest Management and Forest Restoration***. 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 sustainable forest management and forest restoration was around US\$ 60 mln in 2020.

46. ***Global Programme to Support National Voluntary Target Setting for LDN established by UNCCD.*** Georgia defined country voluntary targets towards Sustainable Development Goal (SDG) target 15.3, which includes a commitment to achieve land degradation neutrality (LDN) by 2030. After the adoption of the SDGs in 2015, Government of Georgia took an initiative to contribute to sustainable development through nationalization of the Goals and undertook active measures to adjust SDG agenda and its targets to the national circumstances and to advance their implementation. Achieving Land Degradation Neutrality (LDN) by 2030 is one of such priorities for Georgia. Georgia has joined global programme to support National Voluntary Target Setting for LDN established by UNCCD. The National Working Group established within LDN Target Programme identified the following national voluntary targets for 2030:

- ? Integrate LDN principles into national policies, legislation, strategies and planning documents;
- ? About 1,500 ha of degraded forests will be afforested, about 7,500 ha will be reforested and 60% of forests will be managed sustainably;
- ? Protected areas coverage will be increase up to 12%;
- ? Degraded land will be rehabilitated;
- ? Irrigation and drainage system will be improved.

With the above regard the proposed project will significantly contribute progress through the LDN national voluntary targets.

47. ***The European Neighbourhood 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 Phase III (2018-2022) is 77.5 million (US\$ 91.5 million).

3) The proposed alternative scenario with a brief description of expected outcomes and components of the project

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48. This GEF-supported 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 developing integrated land-use and transport plans for the city of Kutaisi. Specifically, it is aimed at delivering global climate change and land degradation benefits by facilitating a transformative shift towards integrated sustainable urban development in Kutaisi. The Project will deliver the following components:

? Outcome 1 will ensure Kutaisi municipality takes actions to implement low emission development (low-carbon electric public transport) strategies and sustainable land management in and around Kutaisi. This outcome intends to develop plans and policies which will lead new investment decisions which entail significant improvement in the management of transport infrastructure;

? Outcome 2 will deliver economic and technical feasibility of integrated municipal projects that have been demonstrated in support of low emission development and LDN and similar integrated municipal projects replicated in similar sites in Kutaisi. The proposed activities would have been unlikely to have occurred under a business-as-usual (BAU) scenario;

? Outcome 3 will deliver to the practitioners of Kutaisi the new knowledge and increased capacity activities on low-carbon electric public transport and sustainable land management. This will include developing capacities and creating awareness for municipal stakeholders, the private sector and urban residents.

49. The Theory of Change (ToC) for this Project (as shown in Annex A) shows intended outcomes for this Project to lead to intermediate states that "strengthen planning and institutional frameworks to enable sustainable development for Kutaisi City" and "scaled-up investments in integrated low-carbon electric solutions in transport and integrated sustainable land management". The impact of these intermediate states is the enabling of a transformative shift towards sustainable urban development within and outside of Kutaisi City of Georgia practices. This will lead to global environmental. 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 through the increased use of sustainable transport modes. The Project will also ensure sustainable urban development policies are implemented at the local scale. The SLM component will provide best practices on how land degradation challenges could be addressed at the city scale. The GEF Project will also support Georgia's national efforts for achieving a land degradation neutrality target.

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

Intended Outcome 1: The Kutaisi municipality takes actions to implement low emission development (low-carbon electric transport) strategies and sustainable land management in and around Kutaisi

50. One of the main outcomes of this Project is to put in place integrated nature based urban development planning and institutional framework that will foster improved low emission development (through low-carbon electric public transport), integrated and sustainable mobility and sustainable land management in and around Kutaisi. This will be achieved in close cooperation with the City of Kutaisi and central line ministries related to climate change, land management and energy efficiency, namely the Ministry of Environmental Protection and Agriculture (MEPA), the Ministry of Economy and Sustainable Development (MESD), and the Ministry of Regional Development and Infrastructure (MRDI). Local stakeholders will be involved through local NGOs and CSOs and the private sector. Under this outcome, support will be provided to develop municipal policy document that will lead to development of integrated land-use or other urban development plan for Kutaisi based on the integrated approach to promote and secure long-term CCM and SLM benefits. As such, it is intended to collect the initial data and define the methodology, and technical approach for the Policy Document.

Output	Activities
<p>1.1 Municipal development policies that lead to development of integrated land-use or other urban development plan for Kutaisi[37]³⁷</p>	<p>1.1.1 Roundtable meetings to decide about development municipal policy document that will lead to development of integrated land-use or other urban development plan for Kutaisi (to include Kutaisi City, MEPA, MRDI, MESD, local NGOs and CSOs, private sector);</p> <p>1.1.2 Undertake initial data collection and define the methodology and technical approach (led by Kutaisi City) for the selected policy direction based on integrated approach to promote and secure long-term CCM and SLM benefits[38]³⁸;</p> <p>1.1.3 Drafting of the Policy Document to address selected policy direction;</p> <p>1.1.4 Review and formal adaption of the Policy Document;</p> <p>1.1.5 Adjust existing or already proposed urban development plans with the Policy Document according to how they are implemented and from feedback from stakeholders.</p>

Output	Activities
1.1 Municipal development policies that lead to development of integrated land-use or other urban development plan for Kutaisi[37] ³⁷	<p>1.1.1 Roundtable meetings to decide about development municipal policy document that will lead to development of integrated land-use or other urban development plan for Kutaisi (to include Kutaisi City, MEPA, MRDI, MESD, local NGOs and CSOs, private sector);</p> <p>1.1.2 Undertake initial data collection and define the methodology and technical approach (led by Kutaisi City) for the selected policy direction based on integrated approach to promote and secure long-term CCM and SLM benefits[38]³⁸;</p> <p>1.1.3 Drafting of the Policy Document to address selected policy direction;</p> <p>1.1.4 Review and formal adaption of the Policy Document;</p> <p>1.1.5 Adjust existing or already proposed urban development plans with the Policy Document according to how they are implemented and from feedback from stakeholders.</p>
1.2. Low Emission Development Strategy (LEDS) and Integrated Sustainable Urban Mobility Plan (ISUMP) for Kutaisi City	<p>1.2.1 Roundtable meetings about sustainable low emission developments (to include Kutaisi City, local NGOs and CSOs, private sector) to discuss the framework of Low Emission Development Strategy (LEDS) and Integrated Sustainable Urban Mobility Plan (ISUMP) for Kutaisi City;</p> <p>1.2.2 Collection of information pertaining to trip-destinations, land use and other relevant data;</p> <p>1.2.3 Working groups to strategize on low carbon transport in Kutaisi City using integrated approach to land use and transportation planning and on composition and outline for the Integrated Sustainable Urban Mobility Plan (ISUMP);</p> <p>1.2.4 Technical assistance to Kutaisi City officers to support development of this strategy and plan and their enforcement.</p>
1.3 Land degradation hot spots, trends and drivers around Kutaisi mapped and disseminated to Kutaisi municipality	<p>1.3.1 Preparing map of land degradation hotspots, trends and drivers to reduce duplication of effort and allow for connected and collective action;</p> <p>1.3.2 Roundtable to discuss identification and approach to hotspots;</p> <p>1.3.3 Disseminate information on hotspots to Kutaisi municipality.</p>
1.4 Improved communication with Sataplia Nature Reserve.	<p>1.4.1 Meetings on regular basis between Sataplia Nature Reserve and Kutaisi City;</p> <p>1.4.2 Agreements between Sataplia and Kutaisi on areas to be developed for integrated approach to land use and transportation planning.</p>
1.5 Capacity development and technical support	<p>1.5.1 Specific workshops on policy engagement with technical support;</p> <p>1.5.2 Seminars on partnership formation and coordination mechanisms on integrated approach to land use and transportation planning.</p>

51. Under Output 1.1, a Policy Document will provide the Kutaisi city administration with a solid policy platform to develop and implement integrated land-use plan and city master plan^[39]³⁹ integrating sustainable urban management and low carbon public transportation aspects. By integrating policy approach in a broader context, an opportunity to develop an integrated approach to planning will demonstrate how land use and transportation planning can be carried out together and could produce better outcomes than separately considered as land use and transportation plans. Regarding land degradation hot spots, trends and drivers will be mapped improve efficiency, reduce duplication of effort and allow for connected, collective action. As such, the Policy Document will take into account the influence of transport on various aspects of land use. The Policy Document will be prepared with a view of identifying integrated land use and low-carbon solutions which could acknowledge the interaction of transportation and urban forest areas and green zones. An integrated approach will simultaneously optimize travel 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. In addition, the Policy Document will include measures to prevent future forest land degradation and secure provision of ecosystem services.

52. Output 1.2 will involve Low Emission Development Strategy (LEDS) and Integrated Sustainable Urban Mobility Plan (ISUMP) for Kutaisi City including cycling strategies with networking map, public transport master planning through the promotion of low carbon bus fleet design to ensure that all relevant stakeholders and authorities are consulted and aware about the planning process. Low Emission Development Strategy (LEDS) and Integrated Sustainable Urban Mobility Plan (ISUMP) will be developed in line with Kutaisi City Development Vision/Strategy for 2040 and according to national low carbon, green growth, sustainable development priorities and best international standards and endorsed by Kutaisi Municipality.

53. Low Emission Development Strategy (LEDS)^[40]⁴⁰ is needed for Kutaisi City to make strong and determined steps towards shifting the urban economy to a low emission development pathway. Demonstration of strong political will from the local government will be crucial to ensure the necessary transformational change underlying this strategy, which guides and combines the development of various Low Emissions Development Strategy (LEDS) sectors into one coherent, thought-through low carbon high economic growth roadmap. LEDS sectors are the ones that contribute to national Greenhouse Gas (GHG) emissions, offering thus opportunities for mitigation action. The challenge for Kutaisi will be to plan its LEDS pathway to find the right balance of most effective measures to curb GHG emissions while supporting robust economic growth. From that point of view most important sectors for Kutaisi will be selected through a broad stakeholder consultation and preliminary data gathering (*activities 1.2.1, 1.2.2 and 1.2.3*) covering the comprehensive GHG landscape in the city, which will help Kutaisi to achieve its LEDS goals.

54. Integrated Sustainable Urban Mobility Plan (ISUMP) will be developed in order to address the challenges of the integrated and sustainable urban, low carbon and nature based transition - transforming, *inter alia*, the overall transport system organization and consequently financing as well as changing the mobility patterns and behaviour of people and businesses in urban area and reducing the emissions generated by the transport sector. The ISUMP will promote innovation and technology transfer for sustainable energy breakthroughs for electric drive technologies and electric mobility and to demonstrate mitigation options with systemic impacts. The ISUMP may include additional supplementary planes and studies, such as Integrated, Safe and Expanded Bicycle Network; New Parking Strategy and Policy for Kutaisi; Electric Transport System for Kutaisi; Public Transport Optimisation and Pilot Corridors Study; and Sustainable Urban Transport Corridors in Kutaisi. The ISUMP will be based on the following eight principles that are widely accepted in Europe and internationally[41]⁴¹:

- ? Plan for sustainable mobility in the functional urban area?
- ? Cooperate across institutional boundaries
- ? Involve citizens and stakeholders
- ? Assess current and future performance
- ? Define a long-term vision and a clear implementation plan
- ? Develop all transport modes in an integrated manner
- ? Arrange for monitoring and evaluation
- ? Assure quality

55. Detailed composition, outline and entry points for the ISUMP will be defined through a broad stakeholder consultation and preliminary data gathering (*activities 1.2.1, 1.2.2 and 1.2.3*).

56. Output 1.3 will involve the raising the profile of land degradation hot spots and trends to all relevant stakeholders and authorities. This output will also support measures to review and improve municipal institutional framework for spatial and urban development planning with respect to land management.

57. Output 1.4 will involve the Sataplia Nature Reserve and the Kutaisi municipality in improving communications on a pilot basis. 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.

58. Output 1.5 will involve capacity development and the provision of technical support 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's *Gender Equality Act of 2010*^[42]⁴². Capacity trainings will involve, but not be limited to, trainings on approaches and methodologies for development of Low Emission Development Strategy, Integrated Sustainable Urban Mobility Plans and Energy and Climate Action Plans.

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

Intended Outcome 2: Economic and technical feasibility of integrated municipal projects (green public transport and green urban development) have been demonstrated in Kutaisi

59. The main outcome from Component 2 is to demonstrate the economic and technical feasibility of integrated municipal projects (i.e. green public transport and green urban development) in Kutaisi. This will be achieved in close cooperation with the City of Kutaisi and central line ministries related to climate change, land management and energy efficiency, namely the Ministry of Environmental Protection and Agriculture (MEPA), the Ministry of Economy and Sustainable Development (MESD), the Ministry of Regional Development and Infrastructure (MRDI), the Ministry of Finance (MoF), the National Forest Agency (NFA), the Protected Areas Agency (APA), the Georgian National Tourism Administration (GNTA), the Municipal Development Fund of Georgia (MDF), and the National Center for Disease Control and Public Health (NCDC). Local stakeholders will be involved through local NGOs and CSOs and private sector.

60. Output 2.1 delivers a needs assessment for the Kutaisi low carbon transportation and green city development.

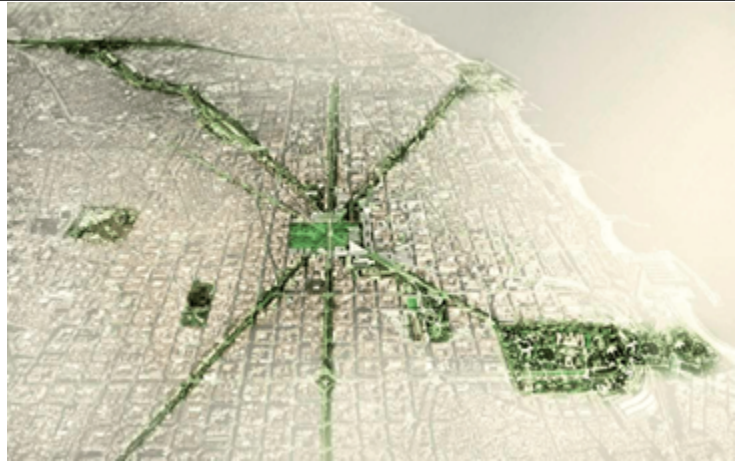
61. Output 2.2 provides a focus on the low carbon transport demonstration from the City to Sataplia Nature Reserve. Delivery of these outputs will be augmented by a consulting team. The products from the Outputs 1.2 and 2.2 will result in Output 2.3, a GCF concept note to scale up low-carbon transport in Kutaisi.

Output	Activity
2.1 Needs assessment and resource mobilization strategy/plan for Kutaisi Low emission electric urban transportation and green city development	2.1.1 Recruitment of a consultant or consulting team to undertake study of integrated land use and transportation study; 2.1.2 Consultant studies general improvements to low emission transport routes and potential for green city development; 2.1.3 Concept is taken up by Kutaisi municipality who elaborates the resource mobilization strategy.
2.2 Economic and financial analysis and design of low emission electric public transportation solutions of identified Kutaisi City to Sataplia Nature Reserve corridor	2.2.1 Intense study with design and financial and economic analyses of low emission transport solution from Kutaisi to Sataplia Nature Reserve; 2.2.2 Investment needs assessed for low carbon public transport system that has been disseminated to policymakers.
2.3 A GCF concept note that proposes scale up low-carbon transport in Kutaisi	2.3.1 A GCF concept note is prepared from Activities 2.1.2, 2.2.1 and 2.2.2.
2.4 At least 2 operational demonstration projects ^[43]	2.4.1 Development of 1 operational demonstration project plan and oversight supervision of integrated low carbon transport to increased share of urban trips performed by e-busses, cycling and walking, connecting Kutaisi city center to Sataplia Nature Reserve and integrating the purchase of at least 2 electric EU-5 buses with this demonstration; 2.4.2 Development of 1 operational demonstration project plan and oversight supervision of sustainable land management demonstration at the sustainably urban forest areas in Kutasi City; 2.4.3 Effectiveness and results of the demonstrations documented and disseminated to key decision makers.

62. Output 2.4 will deliver capital investments for technology demonstrations, executed jointly by the Kutaisi City administration and the Ministry of Environmental Protection and Agriculture (MEPA). Ministries collaborating on this initiative include 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). Work on this output will be the setup for at least 2 demonstration projects that have undergone a financial needs assessment for achieving low emission urban transportation and green city development (from Output 2.2), a resource

mobilization strategy, and a GCF concept note to scale up low-carbon transport in Kutaisi (Output 2.3). The resource mobilization strategy will also facilitate and leverage investment for their wide-scale application from the Government's 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 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 to and from and within forest zone. This initiative will also try to use the best international practices of integrated low carbon and SLM solutions such as shown on Figure 8.

Figure 8: International best practices of integrated low-carbon and SLM solutions for the cities

	
<p>Barcelona: Green Urban Corridor Network[1]</p>	<p>Certosa Island: Venice's Low-carbon Urban Park[2]</p>

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

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

63. This low emission electric urban transportation pilot initiative of Output 2.4 has the potential to provide long-term 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 Kutaisi City Center to 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). With a total of 2 buses planned for the green transport route to Sataplia Nature Reserve, the total estimated cost will be around US\$350,000 inclusive of the capital cost of the vehicle body, battery, fast charging station, low-power charging station, and feasibility studies.

64. This will be complemented by appropriate SLM measures along with the corridor as well as in the urban forest zone, namely rehabilitation of degraded urban forest land, and creation of green zones on existing degraded land owned by the City along transport corridor to make proposed low-carbon transport alternatives more attractive. SLM measures along with the corridor as well as at the sustainably urban forest areas in Kutaisi City will be aimed at targeting at the first place most vulnerable urban natural forest areas (e.g., *Saghoria Forest*^{[47]⁴⁵) to meet LDN targets and will include, but not limited to, measures such as land/soil rehabilitation to avoid, reduce or recover land/soil, anti-erosion measures (*anti-erosion or counter erosion measures are all actions to reduce the vulnerability of landscapes to soil-erosion processes. The key to erosion control is preventing the detachment of soil particles and reducing the volume of runoff. These measures include a broad range of technical and biological soil-treating actions and the rehabilitation of degraded areas as well as changes in land-use planning and agricultural management. These measures often involve the creation of a physical barrier. Due to different environmental conditions, anti-erosion measures vary accordingly to the specific*), restoration of degraded natural urban forest stands, planting of native (non-invasive) tree species ? with higher resistance to air and soil pollution along with the corridor, the establishment of monitoring points, etc.}

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

Intended Outcome 3: The practitioners of Kutaisi apply the new knowledge and increased capacity on low-carbon electric public transport and sustainable land management

Output	Activities
3.1 Capacity needs an assessment development plan	3.1.1.Roundtable to discuss capacity development plan and address capacity needs; 3.1.2 Prepare the capacity development plan.
3.2 At least 200 key actors from the public and private sectors demonstrate increased knowledge and capacity on low carbon electric urban transport and sustainable land management	3.2.1 Awareness-raising materials produced by the City and disseminated amongst the policymakers and the general public 3.2.2 Seminars and workshops that raise the profile of the integrated SLM green transport solutions being promoted by the City.
3.3 User-friendly knowledge management and awareness-raising system under a Kutaisi City website	3.3.1 Web developer recruited to bring together platform on the integrated solutions to policymakers and the general public 3.3.2 Routine maintenance of site and updating of information.

65. The outcome for the third component is that the City of Kutaisi has improved capacities for low-carbon electric public transport and sustainable land management. This will include uptake, adoption and application of the output by intended beneficiaries that will be observed as a change in institutions or behaviors, attitudes or conditions. The work on this outcome will focus on capacity building, knowledge sharing and dissemination, commencing with a capacity needs assessment and preparation of a capacity building plan for the city administration. A large number of tools exist for 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, Kutaisi 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.

66. For Output 3.1, a roundtable will be conducted amongst city administration, MEPA, MESD, and MRDI to discuss capacity development plan and address capacity needs. On this basis, a capacity development plan will be prepared.

67. For Output 3.2, outreach will be conducted to those whose capacity is being built. A 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) who will be seen to undertake 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 all outcomes on this Project.

68. For Output 3.3, user-friendly web-based knowledge management and awareness-raising system (NMS) will be developed for information sharing, awareness-raising, dissemination and replication purposes which will be integrated into the existing by Kutaisi City website. Web-based knowledge management system will connect local citizens with resources on existing climate smart, low carbon development, sustainable urban land-use and spatial planning, sustainable transport, urban mobility, LD, LDN and SLM tools (e.g., *online Climate Smart Planning Platform*[48]⁴⁶, which provides a central database of more than 320 tools and datasets from 58 organizations, including user reviews). Currently, stakeholders at local municipal and national levels are having difficulties in reaching the relevant information in terms of best practices, projects, laws, theoretical knowledge, training modules and organizations. An interactive web-based platform will allow them to access these essential resources and help in developing networks and exchange of information. On top of all this, a series of

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

69. The possibility to add content and share experiences online for the registered users will increase the sense of ownership of the platform in Output 3.3. 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 where 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 area and/or Impact Program strategies

70. 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.

71. 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

72. 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 the second largest in Georgia by land area of 70 km² and until recently by population of over 196,000. 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. Kutaisi City has been selected for NDC work because it has significant GHG emissions in the transport sector which will continue to grow. However, in the 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 due to lack of experience, expertise and capacities at municipal level and Kutaisi not having an integrated and general transport plan.

73. In the baseline situation, there will still be an absence of more prescriptive guidance and policies for integrated low carbon solutions through nature based urban development and a lack of awareness and knowledge of benefits of integrated low carbon and nature based urban development in Kutaisi. Integrated low carbon and nature based urban development is a crucial issue for Kutaisi City. Namely, the City government has yet to develop a consistent integrated policy on sustainable low carbon transport, which should integrate land use, urban planning, traffic management, and intelligent low emission transport systems into one comprehensive plan. Also, the city has not yet developed holistic approach regarding nature based urban development solutions. In turn, nature-based solutions that are defined as actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits are of utmost importance for Kutaisi ? given that nature-based solutions are multi-functional as opposed to single-purpose grey infrastructure options, they offer numerous co-benefits in terms of public health, social cohesion, biodiversity, climate change mitigation, etc. creating win-win solutions for society, the environment, and the economy. Nature-based solutions provide cost-effective approaches to urban sustainability challenges. The additional direct and indirect benefits generated by nature-based solutions are likely to exceed the costs of implementation and maintenance once they are accounted for. Without external intervention, promotion of integrated low carbon solutions and nature-based development approaches will not be neither integrated into wider spatial planning, land-use and sectoral planning documents, nor be implemented in a form of evidence-based pilot projects advocating their public benefits, and engaging with stakeholders for policy development and urban planning.

74. As mentioned in description of the Local Sustainable Energy and Climate Change Planning Framework, over 57 per cent of Georgia's population lives in cities with most traffic 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 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 mainly to demonstrate how land degradation neutrality strategy can be considered in urban and peri-urban landscapes.

75. An estimated US\$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 Component 2. 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. UNEP's contribution will be \$0.15 million. Additional possibilities for co-financing from EBRD and other IFIs are generally foreseen by the Government of Georgia and Kutaisi City but they are not secured and/or negotiated yet.

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

76. Global Environmental Benefits associated with this Project are estimated around 163,800 tCO_{2e}/year directly or about 3,276,000 tCO_{2e} over the lifetime of proposed measures (20 years) and 1,508,868 tCO_{2e} indirectly (consequential emission reductions). These estimates prepared in 2021 are based on the BAU data applied on projections for BAU emissions up to 2030. The estimated annual GHG emission reduction estimates are provided mainly from Output 2.4, namely the purchase of 15 EU-5 buses through EBRD and the demonstration project consisting of 2 low emission electric urban transport vehicles. Consequential annual emission reductions are therefore 681,980 tonnes CO_{2e}. Details of these calculations are provided in Annex U.

77. 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) Innovativeness, sustainability and potential for scaling up

78. Innovativeness: The innovativeness of this Project is related to it being the first in Georgia which at the city level aims at designing overall an Integrated Green City Development Strategy for the City of Kutaisi, integrating concept of sustainable green city with sustainable transport and sustainable land management practices. There is no other ongoing or planned initiatives or projects in Georgia, which has such an innovative approach which focuses on the sub-national level activities.

79. **Sustainability:** 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 the City Administration-approved Covenant of Mayors (CoM). 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 and this the sustainability 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.

80. **Scaling Up:** 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. Kutaisi City will serve as a pilot city prior to the scaling-up of its integrated low carbon SLM plans. The Project will ensure inclusion of the stakeholders of these municipalities in the capacity development and knowledge management activities

[1] 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>

[2] 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>

[3] 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>

[4] 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>

[5] **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

[6] **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, Belarus, 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/>

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

[8] 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>

[9] **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

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

[11] <http://nala.ge/uploads/kutaisi.pdf>

[12] 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>

[13] 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>

[14] **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>

[15] **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>

[16] City Master Plan includes, *inter alia*, a zoning map.

[17] **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>

[18] 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*).

[19] Service provider of Kutaisi City (www.geographic.ge).

[20] Source: **Kutaisi City Development Vision/Strategy for 2040 Document (2021)**. City of Kutaisi / GIS and RS Consulting Center "*GeoGraphic*".

[21] Assumes current area of Kutaisi is 70 sq. km (7,000 ha). Under the proposed Development Vision, the areas would be extended by 1,354 ha, for a total area of 83.54 sq. km (8,354 ha).

[22] **Georgia's Updated Nationally Determined Contribution - NDC (2021)** // Approved by the Decree of the Government of Georgia No.167 of April 8, 2021. https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Georgia%20First/NDC%20Georgia_ENG%20WEB-approved.pdf

[23] **Georgia's 2030 Climate Change Strategy (2021)** // Approved by the Decree of the Government of Georgia No.167 of April 8,2021 / (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG)*, web-page: matsne.gov.ge, Registration Code No. 360110000.10.003.022723, Published on 13.04.2021) - [in Georgian] <https://matsne.gov.ge/ka/document/view/5147380?publication=0>

[24] **Action Plan for 2021-2023 of the Georgia's 2030 Climate Change Strategy (2021)** // Approved by the Decree of the Government of Georgia No.167 of April 8, 2021 / (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG)*, web-page: matsne.gov.ge, Registration Code No. 360110000.10.003.022723, Published on 13.04.2021) - [in Georgian] <https://matsne.gov.ge/ka/document/view/5147380?publication=0>

[25] The decree #167 of the Government of Georgia dated by 8 April 2021 on Updated Nationally Determined Contribution (NDC), Georgia's Climate Change Strategy for 2030, and Action Plan for 2021-2023: <https://matsne.gov.ge/ka/document/view/5147380?publication=0>

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

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

[27] 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

[28] **Georgia's Updated Nationally Determined Contribution - NDC (2021)** // Approved by the Decree of the Government of Georgia No.167 of April 8, 2021.

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Georgia%20First/NDC%20Georgia_ENG%20WEB-approved.pdf

[29] **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 Georgian] <https://matsne.gov.ge/ka/document/view/2739660>

[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] As of 2014 (Source ? Kutaisi SEAP).
https://mycovenant.eumayors.eu/docs/seap/15784_1419252832.pdf

[32] **Georgia's 2030 Climate Change Strategy (2021)** // Approved by the Decree of the Government of Georgia No.167 of April 8, 2021 / (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG)*, web-page: matsne.gov.ge, Registration Code No. 360110000.10.003.022723, Published on 13.04.2021) - [in Georgian]

<https://matsne.gov.ge/ka/document/view/5147380?publication=0>

[33] **Action Plan for 2021-2023 of the Georgia's 2030 Climate Change Strategy (2021)** // Approved by the Decree of the Government of Georgia No.167 of April 8, 2021 / (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG)*, web-page: matsne.gov.ge, Registration Code No. 360110000.10.003.022723, Published on 13.04.2021) - [in Georgian]

<https://matsne.gov.ge/ka/document/view/5147380?publication=0>

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

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

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

[37] This is based on an integrated approach to promote and secure long-term CCM and SLM benefits and disseminated to policy and decision makers of Kutaisi city. The resulting municipal development policy will support the implementation of the Spatial Planning, Architectural and Building Code (2018) and Rules for Development of Spatial and Urban Plans (2019).

[38] 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

[39] 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.

[40] The concept of Low Carbon Development has its roots in the United Nations Framework Convention on Climate Change (UNFCCC) adopted in Rio in 1992. In the context of this convention, Low Carbon Development is now generally expressed using the term Low Emission Development Strategies (LEDS), also known as Low Carbon Development Strategies, or low carbon growth plans. Since the Convention was established, the enhanced understanding of the urgency to address climate change and the experiences from the Kyoto Protocol have led to negotiations focusing increasingly on engaging all countries in the global mitigation effort while reflecting the Convention principle of a common but differentiated approach to meet the overall emissions reduction objectives: "All countries shall prepare Low Emission Development Strategies" nationally-driven and representing the aims and objectives of individual Parties in accordance with national circumstances and capacities" (Cancun Agreement). Though no formally agreed definition exists, LEDS are generally used to describe forward-looking national economic development plans or strategies that encompass low-emission

and/or climate? resilient economic growth . LEDES have been specifically mentioned in the Copenhagen Accord, which recognized that a LEDES is indispensable to Sustainable Development (SD). Possessing the attribute 'low emission,' the concept of LEDES is predominantly related to the climate change mitigation thematic area, essentially emissions reduction.

[41] **EC Updated Guidelines for Sustainable Urban Mobility Planning (2019)** // Guidelines for Developing and Implementing a Sustainable Urban Mobility Plan, Second Edition, 2019. Copyright of the European Commission.

https://www.eltis.org/sites/default/files/sump_guidelines_2019_interactive_document_1.pdf

[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 2.4. At least 2 demonstration projects implemented: (increased share of urban trips performed by e-busses, cycling and walking to sustainably managed Sataplia Nature Reserve): 2 low emission electric urban transport vehicles (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] *Saghoria Forest* - part of total 700 ha of forest area of Kutaisi City. *Saghoria Forest* with an area of about 65 ha (0.65 km²) is a historic oak grove at the southern edge of the Kutaisi city.

[48] Climate Smart Planning Platform. World Bank Group.

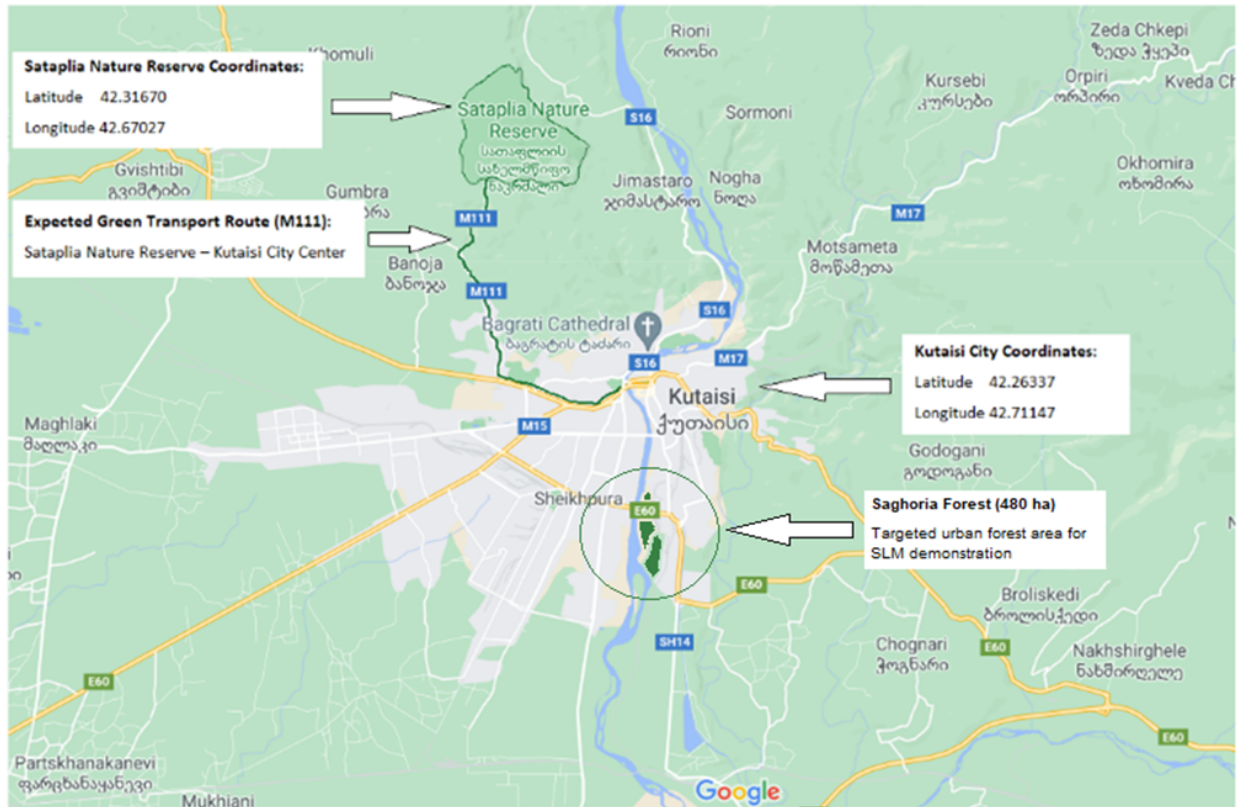
<https://www.greengrowthknowledge.org/tools-and-platforms/climate-smart-planning-platform>

1b. Project Map and Coordinates

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

1. Map showing location of the project intervention area is provided in Figure 9 below. For more details on programme maps and geographic coordinates, please see Annex E (Project Maps and Coordinates).

Figure 9: Map where project interventions will take place ? City, Region and Country Location



1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

2. Stakeholders

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

Civil Society Organizations Yes

Indigenous Peoples and Local Communities

Private Sector Entities Yes

If none of the above, please explain why: No

Please provide the Stakeholder Engagement Plan or equivalent assessment.

1. During the 2018 and 2019 project identification phase, 12 working meetings with 60 people were arranged with local civil society organizations, private sector entities and representatives of the

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

2. To ensure effective engagement of stakeholders, following meetings were held during the PPG phase:

? Inception Workshop organized at the beginning of the PPG phase aimed to introduce the overall project goal, components, and timeline to stakeholders and to present draft action plan for discussion. Inception Workshop gathered the participants from the Government of Georgia, Kutaisi Municipality, REC Caucasus, NGOs and International Organizations and expert.

? Validation Workshop organized at the end of the PPG phase gathered up to 20 stakeholders from the Government of Georgia, Kutaisi Municipality, REC Caucasus, International Organization and experts. Aims of the validation workshops were to review the PPG consultation process and outline key findings, to present and discuss the key elements of the project design, to provide opportunity for stakeholders to discuss the proposed implementation approach and provide feedback, to provide opportunity for stakeholders to endorse the draft project document for follow-up submission to the GEF Secretariat.

3. 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 population of the Project area does not include indigenous or ethnic minority peoples.

4. The satisfaction of stakeholders with the Project benefits will be considered an important aspect of the success of the Project. As such, Project stakeholder management was a core activity of project preparations and is expected to be a core activity during the implementation phase of the Project. For the above purpose, a detailed Stakeholder Engagement Plan is provided in Table 3 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.

5. The Stakeholder Engagement Plan defines the technically appropriate approach to consultation and disclosure. The goal of this plan is to improve and facilitate decision-making and create an environment that promotes the active involvement of stakeholders. Information of future roles of stakeholders and proposed means of future engagement, as well as how the Project will keep engaging stakeholders through adequate means, are also identified in Table 4.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

Table 4: Role of the key stakeholders proposed means of future engagement

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
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Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Government	<p>Ministry of Environmental Protection and Agriculture (MEPA)</p> <p>Environment and Climate Change Department (ECCD)</p> <p>Hydromelioration and Land Management Department (HLMD)</p>	<p>Stakeholder profile:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>History of consultations:</p> <p>The first consultations began on 2018 and 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role:</p> <p>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.</p> <p>At the same time Representatives of these and other relevant departments and units of MEPA will be involved in training sessions.</p> <p>In addition, MEPA will provide advice and technical assistance in planning and developing project activities to prevent land degradation.</p>	<p>? Detailed engagement Plan will be elaborated at inception phase of the project implementation</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Government	National Forest Agency (NFA)	<p>Stakeholder profile: 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).</p> <p>History of consultations: The first consultations began on 2018 and 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: 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.</p>	<p>Project will frequently engage with NFA throughout Project, primarily on Outcomes 1 and 3 by: ? informing them of Project activities and intentions; ? consulting and collaborating with them on improving</p>
Government	Protected Areas Agency (APA)	<p>Stakeholder profile: 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).</p> <p>History of consultations: The first consultations began on 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: 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.</p>	<p>The Project will engage with APA through on a frequent basis throughout the course of implementation of Outputs within Outcomes 1 and 3: ? informing them of Project activities and intentions where their inputs will be impactful; ? consulting and collaborating with them.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Government	<p>Ministry of Economy and Sustainable Development (MESD)</p> <p>Transport and Logistics Development Policy Department (TLDPD)</p> <p>Energy Policy and Investment Projects Department (EPIPDP)</p> <p>Energy Reforms and International Relations Department (ERIRD)</p>	<p>Stakeholder profile:</p> <p>Ministry of Economy and Sustainable Development (MESD) is responsible for the for-energy efficiency in buildings, transport and the issues of green economy. 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-in-transport 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 legislative framework.</p> <p>History of consultations:</p> <p>The first consultations began on 2018 and 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role:</p> <p>MESD will be involved in the elaboration and scaling up of Integrated Green City development framework. Under EEC membership, Georgia needs to introduce fuel quality and fuel efficiency standards.</p> <p>MESD's key functional departments like Transport and Logistics Development Policy Department (TLDPD) and Energy Reforms and International Relations Department (ERIRD) will help to identify and plan coherent fuel efficiency standard and practices for urban transportation system development.</p>	<p>The Project will engage with MESD on a frequent basis throughout the course of implementation of Outputs good and Outcomes 1, 2 and 3:</p> <p>? informing them of activities and intentions where their inputs will be impactful;</p> <p>? consulting and collaborating with them.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Government	Georgian National Tourism Administration (GNTA)	<p>Stakeholder profile: 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).</p> <p>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.</p> <p>History of consultations: The first consultations began on 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: 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.</p>	<p>The Project will engage with GNTA through on a frequent basis throughout the course of implementation of the various Outputs of Outcome 3 by: ? informing them of Project activities and intentions where their inputs would be impactful; ? consulting and collaborating with them</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Government	Ministry of Regional Development and Infrastructure (MRDI) Spatial Planning Department (SPD) Roads Department of Georgia (GeoRoad)	<p>Stakeholder profile: 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..</p> <p>History of consultations: The first consultations began on 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: MRDI will contribute in development of policy document and identification of coherent concept on urban roadways and transportation system development. In addition, MRDI's SPD will be involved in coordination for development of LEDS and ISUMP for Kutaisi based on integrated approach to promote and secure long-term CCM and SLM benefits.</p>	<p>The Project will engage with MRDI through on a frequent basis throughout the course of implementation by: ? informing them of their provision of Project inputs, notable for Outcome 2; ? consulting and collaborating with them on ? other Outputs of Outcome 2</p>
Government	Ministry of Finance (MoF)	<p>Stakeholder profile: Ministry of Finance (MoF) is responsible for public finance, fiscal and budgetary management (incl. allocation of state transfers from state budget to local-self-government /cities and municipalities/ budgets). MoF is central body in charge of budgetary planning at national level.</p> <p>History of consultations: The first consultations began on 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: 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.</p>	<p>The Project will engage with MoF through on a frequent basis throughout the course of implementation by: ? informing them of their provision of Project inputs, notable for Outcomes 2 and 3; ? consulting and collaborating with them on other Outputs of Outcome 2.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Government	National Center for Disease Control and Public Health (NCDC)	<p>Stakeholder profile: 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.</p> <p>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.</p> <p>History of consultations: The first consultations began on 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: 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.</p>	<p>The Project will engage with MRDI through on a frequent basis throughout the course of implementation by: ? informing them of their provision of Project inputs, notable for Outcome 2; ? consulting and collaborating with them on other Outputs of Outcome 2.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Municipal Government	Municipal Development Fund of Georgia (MDF)	<p>Stakeholder profile: 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 (cities and municipalities), 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 (incl. international donors financed projects) 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).</p> <p>History of consultations: The first consultations began on 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: Permanent consultations and direct involvement of MDF in implementation of urban planning activities under the project will be of particular importance for achieving project outcomes and outputs.</p>	<p>The Project will engage with partner municipalities on a frequent basis throughout the course of implementation of Outcomes 1 to 3 by: ? informing them of Project activities and intentions; ? consulting and collaborating with them.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Municipal Government	City of Kutaisi	<p>Stakeholder profile: 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 . 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 (?Sakrebulo?), while executive functions are performed by the City Hall (known also as City Administration). Amongst other municipal services that are being provided, functions of Kutaisi City Hall (Kutaisi City Administration) 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).</p> <p>History of consultations: The first consultations began on 2018 and 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: 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.</p> <p>The City of Kutaisi will be the main partner and key decision maker in all the stages of the project development. Project local</p>	<p>The Project will engage with the City on a frequent basis throughout the course of implementation of all Outcomes: ? informing them of Project activities and intentions; ? consulting and collaborating with them.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Municipal Government	Other municipalities in Imereti Region	<p>Stakeholder profile: 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.</p> <p>History of consultations: The first consultations began on 2018 and 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: 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.</p>	<p>The Project will engage with the other municipalities on a frequent basis throughout the course of implementation of all Outcomes: ? informing them of Project activities and intentions; ? consulting and collaborating with them.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Universities	<p><i>Kutaisi State University</i></p> <p><i>Kutaisi International University</i></p>	<p>Stakeholder profile: Kutaisi State University (ATSU) was established in 1990 by merging two higher educational institutions - Kutaisi Technical University and Kutaisi Teachers University. Currently, the ATSU is running educational courses and programmes in exact and natural sciences, technological engineering, business and agriculture. <i>(https://www.atsu.edu.ge/index.php/en)</i></p> <p>History of consultations: The first consultations began on 2018 and 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p> <p>Stakeholder profile: Kutaisi International University (KIU) is newly established higher educational institution which became operational in 2020. It offers educational programmes into number of English language undergraduate and graduate degree programs in management, mathematics and computer sciences. Academic programs at KIU are focused on developing practical skills, application of knowledge and support innovations and entrepreneurship. The study and research environment are to meet top-level standards to shape the profile of KIU from the very beginning. Government of Georgia is planning that KIU will be the largest, regional education and research hub in the Caucasus with modern university campus. KIU is developed through strategic partnership with Technical University of Munich (TUM). Cooperation's scope includes academic and research programs as well as in its organizational structure and development plan. In 2020, TUM has opened an office in Georgia</p>	<p>Stakeholders Role: Both universities (ATSU and KIU) will help to identify gaps and challenges related to the application of low emission and integrated green city concepts, and to identify the most efficient directions and mechanisms for related \strategic and policy documents.</p>	<p>The Project will engage with universities on a permanent basis throughout the course of implementation of all Outcomes via: ? information exchange on Project activities and intentions; ? use of scientific knowledge and know-how from the Universities and where available direct involvement of scientists form the Universities in the Project activities; ? consulting and collaborating with them.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
CSOs/NGOs	<p>Local NGOs and CSOs (e.g. women initiative groups)</p> <p><i>NGO - Imereti Scientists' Union "Spectri?"</i></p> <p><i>NGO - Kutaisi Information Center (KIC)</i></p> <p><i>NGO - The Black Sea Eco?Academy</i></p>	<p>Stakeholder profile: 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.</p> <p><i>NGO - Imereti Scientists' Union "Spectri?"</i> is local non-governmental, not-for-profit organization active in Georgia. The founders of ?Spectri? are scientists working in the fields of Education and Science, Environment, Waste Management, Energy Efficiency, Social and Health Care, and Development of Small Businesses.</p> <p><i>NGO - Kutaisi Information Center (KIC)</i> is local non-governmental organization founded in 2000 with the support of the British organization "LINKS". The goals of the organization are: to make information about the work of local government bodies more accessible to citizens; To deepen the knowledge of educational institutions and local population about the rights granted to them by the current legislation.</p> <p><i>NGO - The Black Sea Eco?Academy</i> is non-governmental and non-profit organization, founded by the Black Sea NGO Council in Batumi, in 1994. During 21 year of active work in the region the organization has implemented more than 30 projects related to environmental protection and natural resources management, socio-economic and rural development, biodiversity conservation and protected areas management, including activities to support Batumi Municipality in influencing urban travel behaviour and improving public awareness on sustainable</p>	<p>Stakeholder Role: 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.</p> <p>Project will closely cooperate with Gender Commission established by Kutaisi City Council (?Sakrebulo?) under Georgia?s Gender Equality Act of 2010 . 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.</p>	<p>The Project will engage with CSOs and NGOs on a frequent basis throughout the course of implementation of all Outcomes: ? informing them of Project activities and intentions; ? consulting and collaborating with them.</p>

Stakeholder type	Stakeholder list	Stakeholder profile History of consultations with the stakeholder	Proposed role of stakeholder during the Project implementation	Engagement plan with the stakeholder during Project implementation
Other donor projects	European Bank for Reconstruction and Development (EBRD)	<p>Stakeholder profile: 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</p> <p>History of consultations: The first consultations began on 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: options for further collaboration with EBRD's e-mobility program will also be discussed during the inception phase.</p>	<p>The eVehicles Project will engage with the EBRD on a frequent basis throughout the course of implementation of Output 3.3 by: ? informing them of Project activities and intentions; ? consulting and collaborating with them</p>
Private sector	Private sector entities	<p>Stakeholder profile: 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.</p> <p>History of consultations: The first consultations began on 2019 during the PIF preparation, and have continued with unofficial meetings to discuss documentation progress since 2020.</p>	<p>Stakeholder Role: 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.</p>	<p>The eVehicles Project will engage with the private sector on a frequent basis throughout the course of implementation of Outcomes 2 and 3 by: ? informing them of Project activities and intentions; ? consulting and collaborating with them</p>

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor; Yes

Co-financier; Yes

Member of project steering committee or equivalent decision-making body; Yes

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

1. 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 improve their economic situation. In particular, with regards to the output of '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?', the Gender Action Plan (GAP) assures integration of key messages on gender in the municipal development policies, and assigning the role of women in SLM, CCM and land-use. The GAP for the output of 'Low Emission Development Strategy (LEDS) for Kutaisi city prepared considering national low carbon, green growth, and sustainable development priorities and reviewed by Kutaisi Municipality?', also encourages the active and effective participation of women, reflects the needs of women and girls in process of planning the strategy, and supports gender-sensitive budgeting in planning and programming.

2. 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, funds within the project 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.

3. To meet the requirements of the GEF Policy on Gender Equality (2017), the Project Gender Action Plan (GAP) is provided on Table 5 against the Project outputs. The Plan has been designed in accordance with the GEF Policy (for more details see also Annex S). 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.

Table 5: Gender Action Plan

<i>Output</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timeframe</i>
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Output	Activity	Responsibility	Timeframe
<p>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 implementation of the Spatial Planning, Architectural and Building Code (2018) and Rules for Development of Spatial and Urban Plans (2019)]</p>	<p>Integrate key messages on gender in the municipal development policies</p> <p>Indicate the role of women in SLM, CCM and land-use. (SDG 5.4: Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate)</p> <p>Consider gender equality while selecting decision makers of Kutaisi City Administration with whom the policies will be shared (SDG 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life)</p> <p>Ensure that policy equally acknowledges and values the specific transport-use requirements of both men and women, taking into consideration time, frequency of use, and restrictions on mobility such as the need for a chaperone, security concerns, etc.</p> <p>Ensure that both women and men are able to fully utilize transport benefits for economic- or income related activities</p>	<p>Project Team with Gender Mainstreaming Expert; Kutaisi City Administration</p>	<p><i>to be determined after project start during inception phase</i></p>
<p>Low Emission Development Strategy (LEDS) and Integrated Sustainable Urban Mobility Plan (ISUMP) for Kutaisi city prepared considering national low carbon, green growth, and sustainable development priorities and reviewed by Kutaisi Municipality</p>	<p>Encourage the active and effective participation of women: carry out at least one consultation for local population with 40% women's participation for collecting needs of women and girl to be addressed in the development strategy</p> <p>Reflecting the needs of women and girls in process of planning the strategy</p> <p>Support gender-sensitive budgeting in planning and programming</p>	<p>Project Team with Gender Mainstreaming Expert; Kutaisi City Administration</p>	<p><i>to be determined after project start during inception phase</i></p>

Output	Activity	Responsibility	Timeframe
Capacity development and technical support provided for policy engagement, partnership formation and coordination mechanisms in a gender-sensitive manner for policy and decision makers	<p>At least one training for the decision-makers in the Kutaisi City Administration on mainstreaming gender in policy making</p> <p>Ensure that policy equally acknowledges and values the time and labor burdens of both men and women</p> <p>Ensure that gender is mainstreamed across all levels of energy-related decision-making and policy, recognizing that energy use is gendered and that barriers to sustainable-energy access and use are also gendered</p>	Project Team with Gender Mainstreaming Expert	<i>to be determined after project start during inception phase</i>
Low emission electric urban transportation and green city development needs assessed, and resource mobilization strategy/plan elaborated by Kutaisi municipality	<p>Women may face risks to their personal security while utilizing public transport, this need has to be taken into consideration</p> <p>Consider the engagement of women in the resource mobilization strategy</p>	Project Team with Gender Mainstreaming Expert	<i>to be determined after project start during inception phase</i>
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	Ensure that gender is mainstreamed across all levels of transport-related decision-making and policy, recognizing that transport use is gendered and that benefits and limitations are felt differently by men and women	Project Team	<i>to be determined after project start during inception phase</i>

Output	Activity	Responsibility	Timeframe
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	<p>Employ women in the demonstration projects: encourage women to participate in work generated by the project. Transport infrastructure and the provision of related services tend to be male-dominated areas, so existing barriers may need to be addressed</p> <p>Consider local women's extensive knowledge about forests, making them an integral part of the land and forest restoration</p> <p>Carry out gender-sensitive selection of key decision makers</p>	Project Team with Gender Mainstreaming Expert; Kutaisi City Administration	<i>to be determined after project start during inception phase</i>
Capacity needs assessment and capacity development plan prepared	<p>Focus on the role of women and girls in the urban development in the process of needs assessment</p> <p>Emphasize the role of women in CCM and SLM and focus on the resources the project can receive from the engagement of women</p> <p>Engage at least 20 municipal staff of whom 40% are women in capacity building training workshops on urban development, low emission development, SLM and gender-responsive budgeting</p>	Project Team with Gender Mainstreaming Expert	<i>to be determined after project start during inception phase</i>

Output	Activity	Responsibility	Timeframe
200 key actors from the public and private sectors demonstrate increased knowledge and capacity on low carbon electric urban transport and sustainable land management	<p>Carry out gender-sensitive selection of key actors from public and private sectors and conduct targeted and culturally sensitive awareness raising and campaigning; ensure equal participation of men and women of Kutaisi</p> <p>disaggregate participation data by sex to identify needs of women engagement and to determine what the project has done to correct the imbalance</p> <p>Include following topics in awareness raising campaign: the use of low-carbon technologies to improve women's income special needs of women and girls in terms of urban transport and empowerment of women in forestry-management leadership roles Gender-responsive budgeting</p> <p>Engage the representatives of Gender Equality Council of Kutaisi in the project implementation (particularly in awareness raising activities)</p> <p>Reflect gender mainstreaming in urban planning and Infrastructure projects in 2021-2022 Kutaisi Gender Equality Action Plan</p>	Project Team with trainer and Gender Mainstreaming Expert; Kutaisi City Administration	<i>to be determined after project start during inception phase</i>
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	<p>Conduct at least one training for general public on the use of the system (with at least 40% women participants)</p> <p>Include the needs of women and girls in the process of urban development in the awareness raising system</p> <p>Include gender-sensitivity and gender mainstreaming issues in the knowledge management process</p>	Project Team with Gender Mainstreaming Expert; Kutaisi City Administration	<i>to be determined after project start during inception phase</i>

<i>Output</i>	<i>Activity</i>	<i>Responsibility</i>	<i>Timeframe</i>
Monitoring and evaluation	Ensure gender-inclusive monitoring, evaluation, and reporting with sex-disaggregated data in project management and information system	Project Team	<i>to be determined after project start during inception phase</i>

[1] **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-in-georgia.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; Yes

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

No

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

1. There were at least 3 working meetings during PPG phase with involvement of representatives from Kutaisi Municipal Transport Company Ltd. which is running public bus service and two private companies which are licensed to run mini-bus services in Kutaisi. Information exchange covered both policy and technical topics related to bus and minibus transport. It was highlighted that in Kutaisi City usage of public transport is sometimes interpreted as an indicator of low social status, as if such persons cannot afford their own cars. The above representatives stated that this view has to be changed and therefore it is important in Kutaisi to raise people's awareness about benefits of using mass transportation: local residents should be sure that public transport is reliable, fast, comfortable, safe, inexpensive and available mean of transmission; citizens should be given accurate information about

all benefits of public transportation, compared to the other means of transport; In parallel, marketing and branding activities is important to be implemented to make its services more reliable and attractive; For that reason, working with various target groups, public transport branding etc. are required; All the above-mentioned will contribute to sustainable development of public transportation. Representatives of the above companies welcomed the planned activities (especially regarding GCF concept note for scale-up of low-carbon transport in Kutaisi aimed at developing economic incentives and instruments to promote private sector for low-carbon transition) under the project and expressed their willingness to cooperate with the Project Team.

2. During the project implementation phase the private sector will be engaged through consultations during low-carbon transport and mobility 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.

3. 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 be further 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).

4. For the purpose to comprehensively engaging 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: Capacity needs assessment development plan). 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: Municipal development policies that lead to development of integrated land-use or other urban development plan for Kutaisi), low emission electric urban transportation and green city development needs assessed, and resource mobilization strategy/plan (Output 2.1: Needs assessment and resource mobilization strategy/plan for Kutaisi Low emission electric urban transportation and green city development), economic and financial analysis and design of low emission electric public transportation solutions (Output 2.2: Economic and financial analysis and design of low emission electric public transportation solutions of identified Kutaisi City to Sataplia Nature Reserve corridor) and GCF concept note to scale up low-carbon transport in Kutaisi (Output 2.3: A GCF concept note that proposes scale up low-carbon transport in Kutaisi).

5. 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 its share 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.: 1958-11s, 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

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

1. The project is subject to risks that can be anticipated. Adequate risk management and mitigation strategies ensuring successful project implementation may be developed and implemented. The possible risks are shown in Table 5.

Table 6: Risks

<i>Risks</i>	<i>Rating</i>	<i>Mitigation Measures</i>
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.

<i>Risks</i>	<i>Rating</i>	<i>Mitigation Measures</i>
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, the 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.

<i>Risks</i>	<i>Rating</i>	<i>Mitigation Measures</i>
Climate change impacts including increased precipitation and flooding	Low	<p>Key aspects of the climate change projections/scenarios at the project locations, relevant for the type of intervention being financed (e.g. changes in temperatures, rainfalls, increased flooding, saltwater acquirer contamination, increased soil erosion, etc.) were outlined and assessment was done including time horizon (up to 2050) according to the STAP guidance[1] ? linking key potential hazards and describing plans for climate change risk assessment and climate risk mitigation measures (see below):</p> <p><u>Assessment of climate change</u> Based on the assessment of current changes in climate on the basis of existing statistical data (1955-2005) and other available data[2], 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.</p> <p>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.</p> <p><u>Hazard Assessment</u> 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.</p> <p>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.</p> <p>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.</p> <p><u>Plans for mitigation</u> During the Project implementation, Kutaisi municipality's capacity will be strengthened to deal with extreme climate events in general through training workshops to build capacity on climate risk assessment and mitigation. Although the climate change risk is considered low for the Project, climate change mitigation options should focus on:</p> <p>? Enhancing non-motorized transport and public transport. This would include promoting zero-emission transportation systems through the creation of space and infrastructure for non-motorized transportation modes (walking and cycling), and encouraging shared mobility on public transport modes (such as buses and trains) to ensure seamless interconnectivity between these modes of transport.</p> <p>? Electrification of transport. In addition to GHG reduction benefits from the use of electrified transport, the demonstration of electrified</p>

<i>Risks</i>	<i>Rating</i>	<i>Mitigation Measures</i>
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, lobbying 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.
Lack of coordination among stakeholders	Low	Clearly defined project management structure and involvement of all key stakeholders through the work the Project Steering Committee will mitigate the risk and create motivation for coordination among stakeholders. Also, the project proposal includes capacity building and awareness raising measures designed to create the necessary skills in coordination and networking.

<i>Risks</i>	<i>Rating</i>	<i>Mitigation Measures</i>
Risks related to novel Coronavid-19 pandemic and post-pandemic restrictions	High (in short and midterm periods) Medium (in long-term period)	<p>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.</p> <p>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 will be revalidated. Project activities will include stakeholder engagement at the PPG and the implementation phases. In case 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.</p> <p>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 transportation designs will consider reducing the risk of emerging infectious diseases in the future. The project's component on connecting a national park with the city center will provide an opportunity to highlight the positive role of forest and wildlife on human health.</p>

[1] STAP Guidance on Climate Risk Screening (2019) // GEF/STAP/C.56/Inf.03 June 4, 2019 / 56 th GEF Council Meeting, June 11-13, 2019.

https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.STAP_C.56.Inf_03_STAP%20guidance%20on%20climate%20risk%20screening.pdf

[2] *ThinkHazard Portal (2021). The World Bank Group // ThinkHazard* provides a general view of the hazards, for a given location, that should be considered in project design and implementation to promote disaster and climate resilience. The tool highlights the likelihood of different natural hazards affecting project areas (very low, low, medium and high), provides guidance on how to reduce the impact of these hazards, and where to find more information. The hazard levels provided are based on published hazard data, provided by a range of private, academic and public organizations.

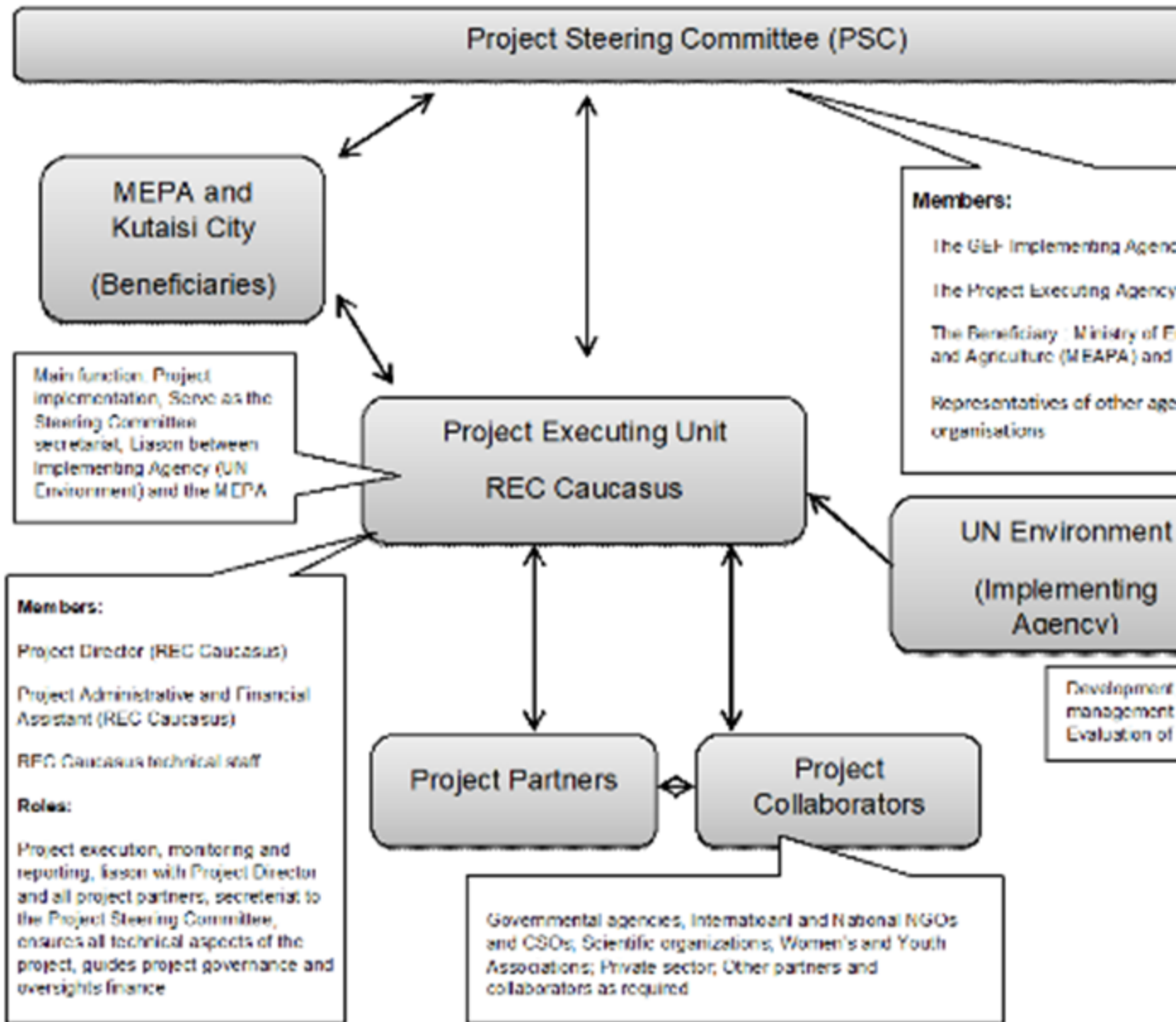
<https://thinkhazard.org/en/report/92-georgia/FL>

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

1. 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. MEPA and Kutaisi City will be the beneficiaries 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).
2. A Project Steering Committee (PSC) will be co-chaired by the Beneficiaries: 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.
3. 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 EA on government policies and priorities.
4. 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.
5. 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 13 presents the institutional structure with major stakeholders of the project including monitoring and evaluation coordination at the project level.

Figure 10: Project Management Arrangements



1. 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.

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

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

1. 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 BAU 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).

2. Georgia's 2030 Climate Change Strategy and Action Plan (Climate Strategy and Action Plan ? CSAP, Climate Action Plan ? CAP)[1] are a planning and implementation mechanism for coordinated effort towards meeting the nationally determined targets for climate change mitigation. Climate Strategy and Action Plan identify the ways for reaching Georgia's 2030 greenhouse gas (GHG) emissions reduction targets for climate change mitigation, as set in Georgia's Updated Nationally Determined Contribution (NDC)[2] to the Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC). Climate Strategy and Action Plan identify a long-term vision of GHG emissions reduction by 2030 and specific planned actions. Through the approval of the Paris Agreement in 2017, Georgia joined 191 Parties and committed to contribute towards the goals of the Paris Agreement, among others, to hold the global average temperature increase well below 2 °C, and pursuing efforts to limit to 1.5 °C compared to the pre-industrial level. The NDC aims to reduce national GHG emissions to 35% below the emission levels in 1990 (excluding emissions from land-use, land-use change and forestry (LULUCF), meaning GHG emissions should not exceed 29.25 MtCO₂e in 2030. According to the Paris Agreement, Georgia has a commitment to formulate an Updated NDC at least every five years. In addition, Georgia is expected to show a progression with regards to emission reduction targets or policies and measures with each update insofar as possible, and to strive for net-zero GHG emissions in the second half of the century. The Climate Strategy and Action Plan rely on the definition of Climate Neutrality by the Intergovernmental Panel on Climate Change (IPCC) as the "concept of a state in which human activities result in no net effect on the climate system" (IPCC, 2018), in other words: anthropogenic emissions of GHGs are balanced by their removals over a certain period, and GHG emissions are considered net-zero. Georgia's Climate Strategy and Action Plan identify specific directions and actions for GHG reduction that support the development of the Georgian economy and infrastructure in a way that sets Georgia on a pathway to meet its international obligations and national ambitions for combating climate change. It serves as a vision and action plan for the implementation of climate change mitigation part of Georgia's Updated NDC. In order to explore the options for adapting to the adverse effects of climate change and plan the appropriate measures, Georgia is

preparing National Adaptation Plan (NAP) on the basis of updated Nationally Determined Contribution. Climate Strategy and Action Plan set out the national climate change mitigation policy in the following sectors: Energy Generation and Transmission, Energy Consumption in Transport, Energy Consumption in Buildings, Energy Consumption in Industry and Industrial Processes, Agriculture, Waste Management and Forestry.

3. *Low Emission Development (LED) Strategy for Georgia*: Under the 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.

4. As of July 2017, Georgia became a party to the Energy Community Treaty^[3]. 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^[4], Energy Labelling Act^[5] and Energy Performance of Buildings Act^[6] 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 are working 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 provide an important national backdrop and support mechanism for Kutaisi City in developing the building efficiency codes and standards and other incentive packages and investment.

5. Georgia has also 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. This informs at least 40% of decision makers and 30% of the population about the issues of desertification and land degradation and drought, their relevance with biodiversity and climate

change, and increasing awareness of community-based organizations and scientific institutions on the threats of desertification/land degradation/drought by 2020 (also covered in Para **Error! Reference source not found.**).

6. 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 1,500 ha of degraded forests to be afforested and about 7500 ha to be reforested and 60% of forests to be managed sustainably by 2030.

7. In 2019, Government of Georgia approved National Document for Sustainable Development Goals. 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).

8. 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.

9. 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.

10. 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.

11. Greening urban policies and key urban sectors is also in line with the EU-Georgia Association Agreement/ DCFTA 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.

12. Climate change related National priorities and their implementation status are shown in Figure 11 below:

Figure 11: Georgia's Climate Change related National Priorities and their Implementation Status



[1] **Georgia's 2030 Climate Change Strategy and its Action Plan for 2021-2023 (2021)** // Approved by the Decree of the Government of Georgia No.167 of April 8, 2021 / (*Official Gazette of Georgia ? Legislative Herald of Georgia (LHG)*, web-page: matsne.gov.ge, Registration Code No. 360110000.10.003.022723, Published on 13.04.2021) - [in Georgian] <https://matsne.gov.ge/ka/document/view/5147380?publication=0>

[2] **Georgia's Updated Nationally Determined Contribution - NDC (2021)** // Approved by the Decree of the Government of Georgia No.167 of April 8, 2021.

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Georgia%20First/NDC%20Georgia_ENG%20WEB-approved.pdf

[3] 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>

[4] **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>

[5] **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>

[6] **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) - [Official Version in Georgian] <https://matsne.gov.ge/en/document/view/4873932>

8. Knowledge Management

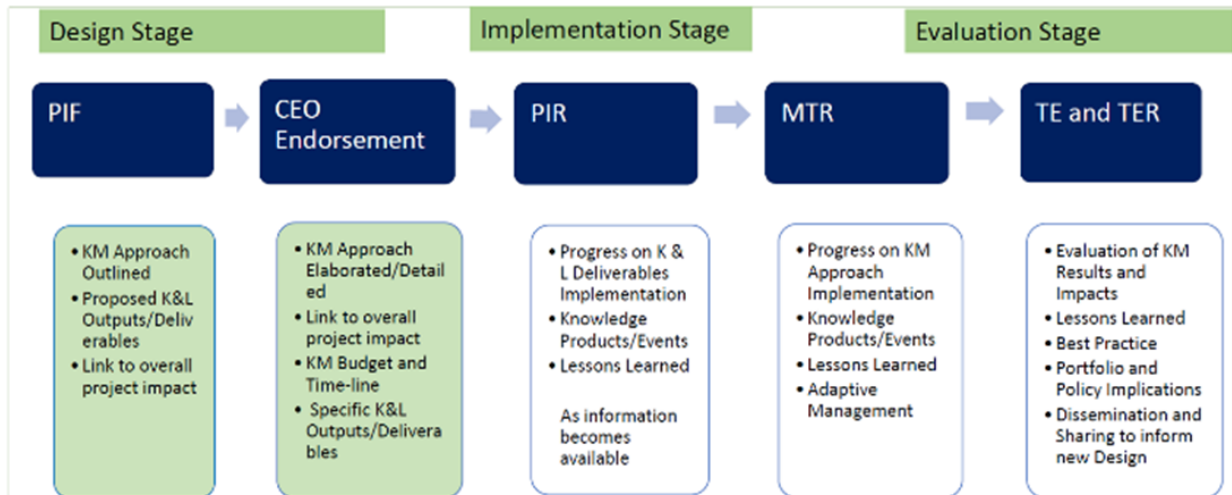
Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

1. 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, and the GEF financed Project ?Generating Economic and Environmental Benefits from Sustainable Land Management for Vulnerable Rural Communities of Georgia? as 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.

2. Knowledge Management Approach for the Project is based on the following steps throughout the Project Cycle shown in Figure 12 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 12: GEF-7 Knowledge Management (KM) Requirements throughout the GEF Project Cycle[1]



3. 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 inception 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.

4. 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.

5. 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

6. 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 developing-country 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, 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 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-infrastructure (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

7. Time-linked Plan to Learn from Relevant Projects, Programs, Initiatives and Evaluations is shown in Table 6 below.

Table 7: Time-linked Plan to Learn from Relevant Projects, Programs, Initiatives and Evaluations during the Project Implementation

Project Year	Step	Action
Identification and analyses of lessons and best practices that will inform the project proposal		
Y1	1	Lessons learned and best practice kick-off organizational meeting
Y1	2	Identification of a final list of relevant projects, programs, initiatives and evaluations
Y1	3	Document findings
Y1	4	Analyze and organize the lessons learned for application of results

Y1	5	Store lessons learned
Application of lessons learned and best practice to inform the project		
Y1	6	Creation of effective tool for storing and retrieving (e.g., shared drive) and the beginning of application of stored lessons learned
Y2, Y3	7	Lessons learned and best practice working meeting(s)
Y2, Y3	8	Integration of lessons learned and best practices into ongoing activities

8. Implementation of the Time-linked Plan 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.

9. 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.

10. 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 from tentative list of which is identified in Table 7 according to focal/priority areas, business sectors and donor organizations.

Table 8: Tentative List of On-going and Completed Relevant Projects, Programs, Initiatives and Evaluations

<i>S/N</i>	<i>Focal/ Priority Area/Business Sector</i>	<i>Primary Donor Organization</i>	<i>Name of relevant Project, Program, Initiative and Evaluation</i>
1	<i>Climate Change</i>	GEF	<i>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)</i>
2	<i>Municipal and Environmental Infrastructure</i>	EBRD EU ESP	<i>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]</i>

S/N	Focal/ Priority Area/Business Sector	Primary Donor Organization	Name of relevant Project, Program, Initiative and Evaluation
3	Municipal and Environmental Infrastructure	EBRD GCF	<p>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]</p> <p>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]</p>
4	Power and Energy	EBRD	<p>Georgian Low Carbon Framework (EBRD Project Number: 48124, Implementing Partner: Government of Georgia, Business sector: Power and Energy, Approval Date: Nov 2015) [13]</p>
5	Connectivity, Energy Efficiency, Environment, Climate Change	EU	<p>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]</p>
6	Knowledge Management, Environmental Monitoring	GEF	<p>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)</p>
7	Climate Change	GEF	<p>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)</p> <p>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)</p>

S/N	Focal/ Priority Area/Business Sector	Primary Donor Organization	Name of relevant Project, Program, Initiative and Evaluation
8	Land Degradation	GEF	<p>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 Area: Land Degradation, GEF Period: GEF-7, Approved for Implementation: Feb 2020)</p> <p>Applying Landscape and Sustainable Land Management (L-SLM) for Mitigating Land Degradation and 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)</p> <p>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)</p>
9	Climate Change	GEF	<p>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)</p> <p>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)</p>
10	Biodiversity	GEF	<p>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)</p> <p>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)</p>

<i>S/N</i>	<i>Focal/ Priority Area/Business Sector</i>	<i>Primary Donor Organization</i>	<i>Name of relevant Project, Program, Initiative and Evaluation</i>
11	<i>Climate Change</i>	GEF	<p><i>Enhancing Resilience of Agricultural Sector in Georgia</i> <i>(GEF Project ID: 5147, Implementing Agency: IFAD, Focal Area: Climate Change, GEF Period: GEF-5, Approved for Implementation: Jan 2015)</i></p> <p><i>Stabilizing GHG Emissions from Road Transport Through Doubling of Global Vehicle Fuel Economy: Regional Implementation of the Global Fuel Economy Initiative - GFEI</i> <i>(GEF Project ID: 4909, Implementing Agency: UN Environment, Focal Area: Climate Change, GEF Period: GEF-5, Approved for Implementation: Nov 2013)</i></p>

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

11. Processes to capture, assess and document information, lessons, best practice and expertise generated during 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.

12. 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.

13. 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.

14. 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.

15. 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.

16. 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.

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(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
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17. 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 (MEPA, MESD, MRDI, NFA, APA, GNTA, MDF, NCDC, and MoF) and local stakeholders (other Cities in Georgia, Local NGOs and CSOs and private sector).

18. 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. An interactive web-based platform will allow them to access these essential resources and help in developing networks and exchange of information.

19. At least 6 stakeholder meetings and demonstration events will be organized to exhibit and validate pilot measures under Component 2 (Output 2.4. At least 2 operational demonstration) 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). 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

20. Along with the development of Knowledge Management (KM) Strategy and Action Plan, long-term plan for strategic communications and knowledge sharing at the national level will be elaborated during the Project implementation period 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).

21. 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.

22. The long-term plan will be promoted across global networks and platforms and much wider. It will be updated annually using the outputs from Outcomes 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-cities-initiative#:~:text=The%20Sustainable%20Cities%20Initiative%20\(SCI,and%20Central%20Asia%20\(ECA\)](https://www.worldbank.org/en/region/eca/brief/sustainable-cities-initiative#:~: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%2FContent%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. Monitoring and Evaluation

Describe the budgeted M and E plan

1. UNEP will be responsible for managing the mid-term review/evaluation and the terminal evaluation. The Project Manager and partners will participate actively in the process.
2. The project will be reviewed or evaluated at mid-term. The purpose of the Mid-Term Review (MTR) is to provide an independent assessment of project performance at mid-term, to analyze whether the Project is on track, what problems and challenges the Project is encountering, and which corrective actions are required so that the Project can achieve its intended outcomes by Project completion in the most

efficient and sustainable way. In addition, it will verify information gathered through the GEF tracking tools.

3. The project Steering Committee will participate in the MTR and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented. An MTR is managed by the UNEP Task Manager. An MTE is managed by the Evaluation Office (EO) of UNEP. The EO will determine whether an MTR is required or if the yearly Project Implementation Review are sufficient because it is a 3 years project.

4. An independent terminal evaluation (TE) will take place at the end of Project implementation. The Evaluation Office (EO) of UNEP will be responsible for the TE and liaise with the UNEP Task Manager throughout the process. The TE will provide an independent assessment of Project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability. It will have two primary purposes:

- ? to provide evidence of results to meet accountability requirements, and
- ? to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP and executing partners.

5. While a TE should review use of Project funds against budget, it would be the role of a financial audit to assess probity (i.e. correctness, integrity etc.) of expenditure and transactions. The TE report will be sent to Project stakeholders for comments. Formal comments on the report will be shared by the EO in an open and transparent manner. The Project performance will be assessed against standard evaluation criteria using a 6-point rating scheme. The final determination of Project ratings will be made by the EO when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process.

6. The direct costs of reviews and evaluations will be charged against the Project evaluation budget. A summary of M&E activities envisaged is provided in Annex L (*Annex L: Costed M&E Plan*). The GEF contribution for M&E activities is USD 50,000. The indicative Monitoring and Evaluation Work Plan is provided in the table below. The estimated total cost (GEF and co-finance) of M&E activities is USD 564,219, fully integrated into the project budget, as shown in Table 9 below:

Table 9: Monitoring and Evaluation Costs

Type of M&E activity	Responsible Parties	Budget from GEF (USD)	Co-finance (USD)	Time Frame
Inception Meeting	Project Director (REC Caucasus), Project Team, Steering Committee, UNEP	0	10,000	Within 2 months of project start-up

Type of M&E activity	Responsible Parties	Budget from GEF (USD)	Co-finance (USD)	Time Frame
Inception Report	Project Director (REC Caucasus)	0	7,000	1 month after project inception meeting
Measurement of project indicators (outcome, progress and performance indicators, GEF tracking tools) at national and global level	Project Manager (UNEP) & Project Director (REC Caucasus), Project Team; Consultants	0	95,000	Outcome indicators: start, mid and end of project Progress/perform. Indicators: annually (Cost incorporated in project components and management budget)
Semi-annual Progress/Operational Reports to UNEP	Project Manager (UNEP) & Project Director (REC Caucasus)	0	85,000	Within 1 month of the end of reporting period i.e. on or before 31 January and 31 July (Cost incorporated in project components and management budget)
Project Steering Committee	Project Manager, UNEP (secretariat), A representative of UNEP Implementing Agency, REC Caucasus Executive Director, National GEF Focal Point for Georgia, MEPA (Member of SC)	0	25,000	At least once a year, and via electronic media per request and need
Reports of PSC meetings	Project Director (REC Caucasus)	0	15,000	Within 1 month after PSC meeting
Project Implementation Review (PIR)	Project Manager; UNEP	0	98,000	Annually, part of reporting routine (Cost incorporated in project components and management budget)
Mid Term Review/Evaluation	? Project Manager; UNEP ? Project Director (REC Caucasus) ? PMU ? External consultant(s) ? UNEP	20,000 (the cost is incorporated in Project Budget under Monitoring and Evaluation Cost)	10,000	At mid-point of project implementation (*Note: If a Mid-Term review is not required for this MSP, these resources will be applied to the Terminal Evaluation)

Type of M&E activity	Responsible Parties	Budget from GEF (USD)	Co-finance (USD)	Time Frame
Terminal Evaluation	UNEP EO	30,000 (the cost is incorporated in Project Budget under Monitoring and Evaluation Cost)	15,000	Within 6 months of end of project implementation
Audit	REC Caucasus	0	25,000	Annually
Project Final Report	Project Manager; UNEP	0	59,219	Within 2 months of the project completion date (Cost incorporated in project components and management budget)
Co-financing report	Project Manager (UNEP) & Project Director (REC Caucasus), Financial Manager(s)	0	20,000	Within 1 month of the PIR reporting period, i.e. on or before 31 July (Cost incorporated in project components and management budget)
Publication of Lessons Learnt and other project documents	Project Director (REC Caucasus); Consultants for lessons learnt evaluation	0	55,000	Annually, also part of Semi-annual reports & Project Final Report
Total M&E Plan Budget		50,000	514,219	

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCE/SCCF)?

Economics

1. The Project will deliver social, economic and environmental benefits as a result of the envisioned technical assistance activities and the demonstration pilots. These include: (a) direct energy savings; (b) mitigated greenhouse gas emission from AFOLU sector; (c) increased efficiency of electric transport mobility and associated costs savings; (d) reduced emissions from transport sector in terms of reduction of atmospheric contaminants in urban area, which relieves public health risks associated with baseline vehicle emissions; (e) development of innovative businesses contributing to economic growth and job creation; and (f) enhanced quality and user experiences.
2. There is not any feasibility study that demonstrates the long-term economic benefits of green urban development or green public transport for Kutaisi. There is a lack of good practices and demonstrations of low carbon urban transportation in Kutaisi. In order for Kutaisi to adopt green urban and green transport development, evidence from demonstrations are needed.
3. Moreover, a robust methodology for quantification of indicated socio-economic benefits in Georgia is currently not in place; aspects such as impact on public health and business and employment will expectedly be assessed as inputs for the economic and technical feasibility studies of integrated municipal projects (i.e. green public transport and green urban development) for Kutaisi City that are envisaged to be elaborated under the main outcome 2 of this project.
4. This low emission electric urban transportation pilot initiative has the potential to provide long-term 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 (*e.g., the round-trip from Kutaisi City Center to 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*).

Supporting the achievement of global environment benefits (GEF Trust Fund)

5. SLM related activities will be undertaken on at least 700 ha of urban forest lands in Kutaisi City. Out of the above 700 ha, restoration activities will cover 220 ha of degraded forest lands, while HCF forest loss will be avoided on the rest 480 ha.

6. Implementation of the Project will contribute to estimated CO2 reduction in total of 3.276 million metric tons of CO2 for a period of 20 years (2024-2044).

7. The project will ensure the sustainability and replicability of global environmental benefits in several ways: enhancing the capacity of the national and local authorities to enforce the implementation and demonstrating modern environmentally friendly technologies.

Social benefits and Gender

8. To meet the requirements of the GEF Policy on Gender Equality (2017), the Project Gender Action Plan (GAP) will be implemented 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.

11. 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*

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate	Low		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

The Safeguard Risk Identification form is included on Page 75 of the attached CEO Approval document.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Annex M Safeguard Risk Identification Form (SRIF)	CEO Endorsement ESS	
ESERN Georgia Kutaisi MFA signed	Project PIF ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Outcome Level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
<p>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</p>				
<p>Tonnes of GHG emission reductions reduced cumulatively and lifetime investment, t CO₂</p>	<p>0 0</p>	<p>163,800 tCO₂ reduced annually 3.276 million tCO₂ over lifetime of investment (20 years)</p>	<p>Surveys</p>	<p>Assumption: Increasing traffic & car ownership, resulting in increases in GHG emission higher than reductions achieved by the project, are assessed and mitigated at municipal and national levels</p> <p>Risk: Increasing traffic & car ownership, resulting in increases in GHG emission higher than reductions achieved by the project</p>

Outcome Level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
Landscapes under improved practices - ha	0	700 ha	Surveys	<p>Assumption : Climate change impacts including increased precipitation and flooding are mitigated at municipal and national levels</p> <p>Risk: Climate change impacts including increased precipitation and flooding</p>

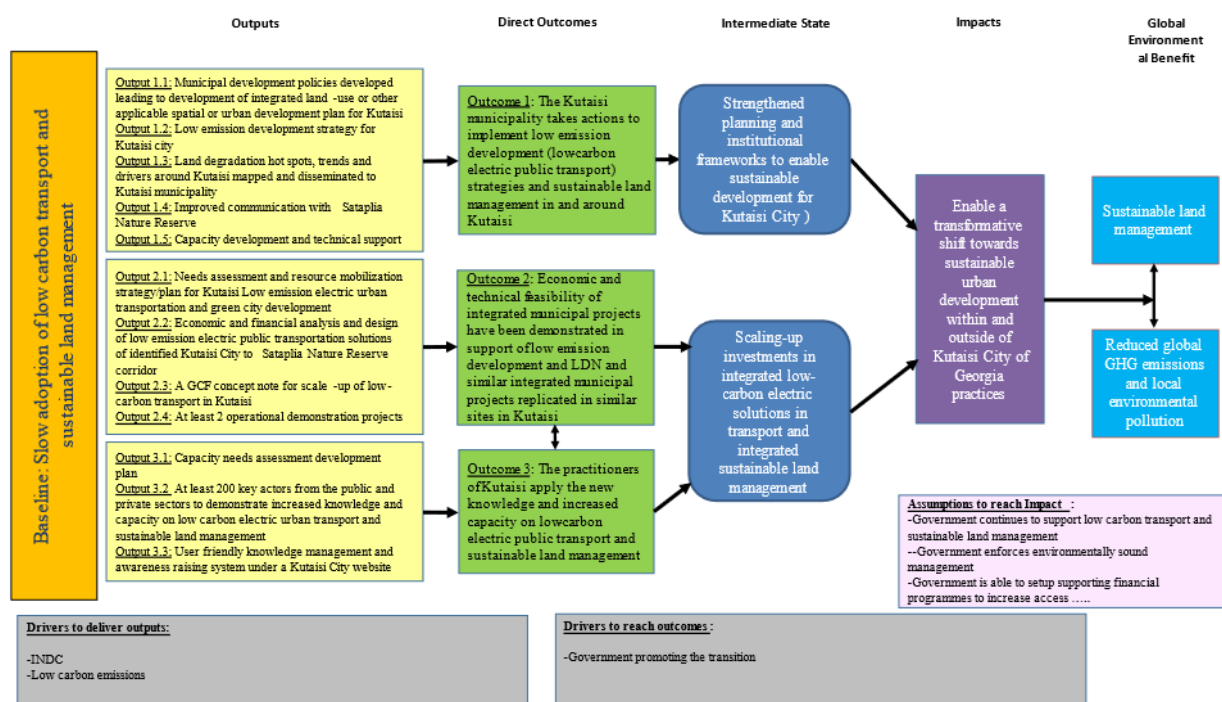
Outcome Level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
Number of direct beneficiaries	0	54,000 of civilians of Kutaisi City (28,000 female, 26,000 male)	Surveys	<p>Assumptions: Municipal co-financing to invest in sustainable transport is available</p> <p>Coronavirus-19 pandemic is properly mitigated according to international and national standards and regulations</p> <p>Risks: Lack of Municipal co-financing to invest in sustainable transport</p> <p>Risks related to novel Coronavirus-19 pandemic and post-pandemic restrictions</p>
<p>Outcome 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 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)</p>				

Outcome Level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
Number of policies developed that lead to development of integrated land-use or other urban sectoral development plan for Kutaisi	0	<i>Project End</i> 1	Policies issued by city government	Risk of increasing number of visitors to the Sataplia natural reserve that may lead to nature degradation Government has continued interest in green urban development
Number of Low Emission Development Strategies and Integrated Sustainable Urban Mobility Plan for Kutaisi city prepared considering national low carbon, green growth, and sustainable development priorities	0	<i>Project end</i> 2	Progress reports	Risk of low political priority
<p><u>Outputs:</u></p> <p>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 implementation of the Spatial Planning, Architectural and Building Code (2018) and Rules for Development of Spatial and Urban Plans (2019)]</p> <p>1-2. Low Emission Development Strategy (LEDS) and Integrated Sustainable Urban Mobility Plan (ISUMP) for Kutaisi city prepared considering national low carbon, green growth, and sustainable development priorities and reviewed by Kutaisi Municipality</p> <p>1-3. Land degradation hot spots, trends and drivers around Kutaisi mapped and disseminated to Kutaisi municipality</p> <p>1-4. Opportunities to better connect Sataplia Nature Reserve with Kutaisi identified and presented to decision makers of the municipality</p> <p>1-5. Capacity development and technical support provided for policy engagement, partnership formation and coordination mechanisms in a gender-sensitive manner for policy and decision makers</p>				

Outcome Level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
<p>Outcome 2: 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. This outcome will be implemented in participatory planning manner with 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)</p>				
Number of demonstration projects in operation	0	2 (1 in low carbon transport, 1 in sustainable land management)	Progress reports	Lack of Municipal co-financing to invest in sustainable low carbon transport and SLM practices
Number of concept notes issued to GCF to scale-up low carbon transport in Kutaisi	0	1	Progress reports	Risk of a lack of municipal co-financing to invest in sustainable transport
Number of months of continuous monitoring of economic and financial analysis on the low carbon transport in Kutaisi	0	<i>Midterm</i> 3 <i>Project end</i> 12	Progress reports	Low political priority
<p><u>Outputs</u></p> <p>2-1. Low emission electric urban transportation and green city development needs assessed, and resource mobilization strategy/plan elaborated by Kutaisi municipality</p> <p>2-2. 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</p> <p>2-3. A GCF concept note to scale up low-carbon transport in Kutaisi is developed based on the feasibility studies and analysis</p> <p>2-4. 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</p>				
<p>Outcome 3: The practitioners of Kutaisi (Kutaisi City local authorities, neighbouring municipalities in Imereti 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</p>				

Outcome Level Indicators	Baseline	Targets and Monitoring Milestones	Means of Verification	Assumptions & Risks
Increase in the capacity development scorecard	15%	<i>Midterm</i> 40% <i>Project end</i> 80%	Filled out capacity development scorecards	Risks related to novel Coronavirus-19 pandemic and post-pandemic restrictions
% of population familiar with Kutaisi City website	0	<i>Midterm</i> 10% <i>Project end</i> 40%	Survey	Risks related to lack of public interest due to novel Coronavirus-19 pandemic and post-pandemic restrictions
<p><u>Outputs:</u></p> <p>3-1. Capacity needs assessment and capacity development plan prepared</p> <p>3-2. 200 key actors from the public and private sectors demonstrate increased knowledge and capacity on low carbon electric urban transport and sustainable land management</p> <p>3-3. 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</p>				

Theory of Change



ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

All comments were cleared at the PIF stage.

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

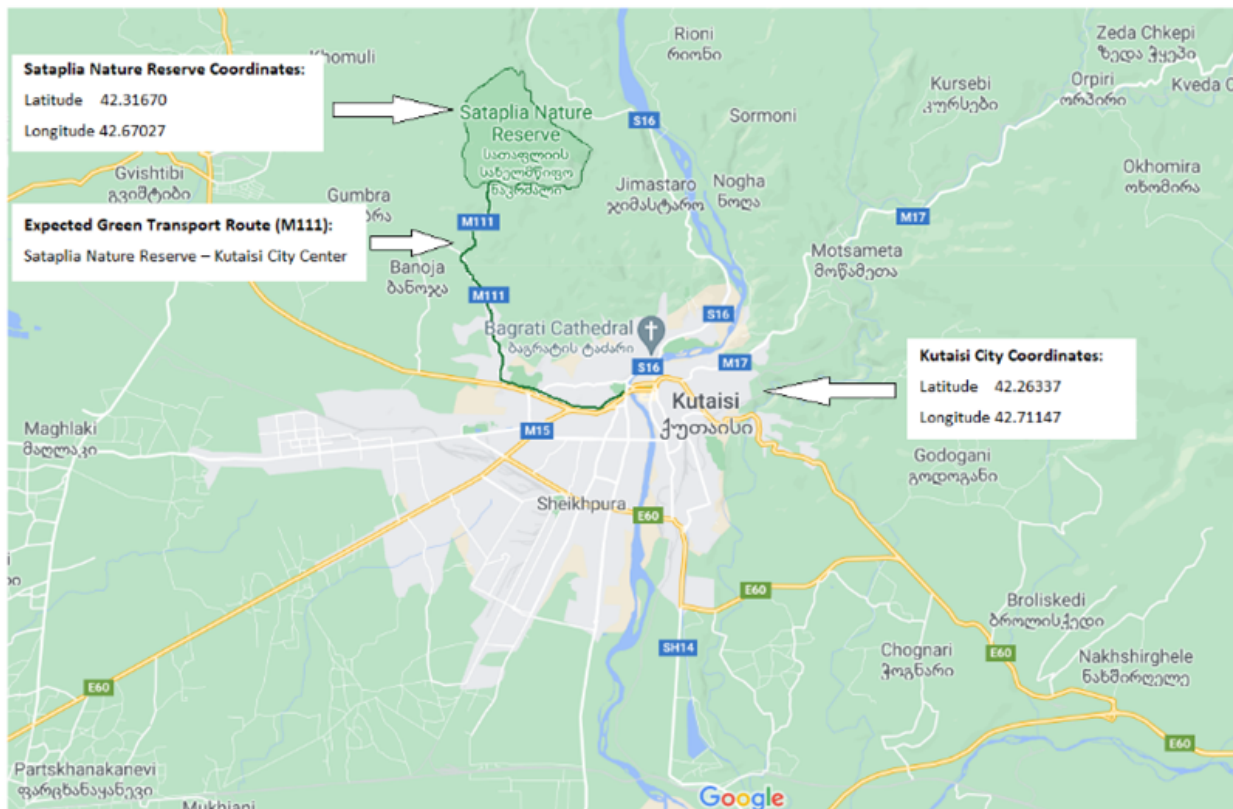
PPG Grant Approved at PIF: 45,664 (\$)		GETF/LDCF/SCCF Amount (\$)		
Project Preparation Activities Implemented		Budgeted Amount	Amount Spent Todate	Amount Committed
		1201	International Consultant	25,567
1202	National Consultants	12,213	7,551	4,662
1601	Travels in the project area	1,300	74	1,226
3301	Meetings and Stakeholders consultations at national, regional and local levels	6,334	2,326	4,008

5101	Bank Charges	250	45	205
Total		45,664	19,996	25,668

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake exclusively preparation activities up to one year of CEO Endorsement/approval date. No later than one year from CEO endorsement/approval date. Agencies should report closing of PPG to Trustee in its Quarterly Report.

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.



ANNEX E: Project Budget Table

Please attach a project budget table.

Detailed GEF Project budget

Project title: Low Carbon Solutions through Nature Based Urban Development for Kutaisi City		
Project number: 10643		
Project executing partner: REC Caucasus		
Project implementation period: 2022-2023-2024		
Fro	01/01/20	Expenditure by project component/activity
m:	22	
To:	31/12/20	
	24	

UNEP Budget Line		1	2	3	Subtotal	Monitoring and Evaluation (M&E)	Project Management Cost (PMC)	Total
10	PERSONNEL COMPONENT							
	1100	Project personnel						
	1101	Project Director						
	1102	Project Assistant						
	1103	Project local coordinator (<i>stationed in Kutaisi</i>)						
	1199	Sub-total	0	0	0	0	79,200	79,200
	1200	Consultants						
	1201	National Experts	251,285	8,000	111,600	370,885		370,885
		<i>of which:</i>						
		[1201-00] Low Carbon&Urban Nature Management Expert	32,000	8,000	48,600	88,600		88,600
		[1201-01] Spatial&Urban Planning Expert	27,000			27,000		27,000
		[1201-02] Transport Mobility Expert	30,285			30,285		30,285
		[1201-03] Low Emissions Expert	22,000			22,000		22,000
		[1201-04] Climate Change Expert	22,000			22,000		22,000
		[1201-05] Socio-Economic Analyses Expert	17,000		2,000	19,000		19,000
		[1201-06] Transport Infrastructure Expert	13,000			13,000		13,000
		[1201-07] Land Restoration Expert	12,000			12,000		12,000
		[1201-08] Urban Forestry Expert	12,000			12,000		12,000
		[1201-09] PR&Communications Expert	18,000		12,000	30,000		30,000
		[1201-10] Gender Expert	18,000		12,000	30,000		30,000
		[1201-11] GIS Expert	16,000		9,500	25,500		25,500
		[1201-12] Environmental Policy&Law Expert	4,000		7,500	11,500		11,500
		[1201-13] Capacity Development Expert	3,000		15,000	18,000		18,000

		<i>[1201-14] IT e-Governance Specialist</i>	5,000		5,000	10,000			10,000
	1202	International Experts	91,600	1,000	20,600	113,200	0	0	113,200
		<i>of which:</i>							
		<i>[1202-01] Urban Infrastructure and Planning Expert</i>	16,000		2,600	18,600			18,600
		<i>[1202-02] Transport Mobility Planning Expert</i>	21,000		2,000	23,000			23,000
		<i>[1202-03] Climate Change and Low Emission Development Expert</i>	21,000		2,000	23,000			23,000
		<i>[1202-04] Urban Institutional and Governance Expert</i>	16,000		12,000	28,000			28,000
		<i>[1202-05] Nature-based Urban Solutions Expert</i>	17,600	1,000	2,000	20,600			20,600
	1299	Sub-total	342,885	9,000	132,200	484,085	0	0	484,085
	1300	Administrative Support							
	1301	Financial Officer						38,500	38,500
	1302	Administration/Procurement Officer						10,800	10,800
	1399	Sub-total	0	0	0	0	0	49,300	49,300
	1600	Travel on official business							
	1601	Travel Local	8,000	1,000	18,436	27,436			27,436
	1602	International Travel/Air Fair	3,000	1,000	8,000	12,000			12,000
	1604	Per Diems ,Accommodation	6,000	1,000	8,000	15,000			15,000
	1699	Sub-total	17,000	3,000	34,436	54,436	0	0	54,436
1999	Component total		359,885	12,000	166,636	538,521	0	128,500	667,021
20	SUB-CONTRACT COMPONENT								
	2300	Sub-contracts (for commercial purposes)							

	2301	Implementation of 1 operational demonstration project on integrated low carbon transport to increased share of urban trips performed by e-busses, cycling and walking, connecting Kutaisi city center to Sataplia Nature Reserve and integrating the purchase of 2 electric EU-5 buses with this demonstration		415,245		415,245			415,245
	2302	Implementation of 1 operational demonstration project on sustainable land management demonstration at the urban forest areas in Kutasi City covering at least 220 ha of urban forests		159,550		159,550			159,550
	2303	Publications and Communication Materials	4,000		17,400	21,400			21,400
	2304	GCF concept note to scale up low-carbon transport in Kutaisi		40,000		40,000			40,000
	2399	Sub-total	4,000	614,795	17,400	636,195			636,195
2999	Component total		4,000	614,795	17,400	636,195			636,195
30	TRAINING COMPONENT								
	3300	Meetings/Conferences							
	3301	National Workshops/Conferences (minimum 1 workshop on the role of gender in land use and land degradation issues)	11,800		11,000	22,800			22,800
	3302	Steering Committee Meetings (4)	5,500		4,000	9,500			9,500
	3303	Working Group Meetings	4,000		3,000	7,000			7,000
	3304	Municipal Workshops	5,000		5,000	10,000			10,000
	3305	Awareness raising, Media Events	9,000		11,000	20,000			20,000

	3399	Sub-total	35,300	0	34,000	69,300	0	0	69,300
3999	Component total		35,300	0	34,000	69,300	0	0	69,300
40	EQUIPMENT AND PREMISES COMPONENT								
	4100	Expendable equipment							
	4101	Office supply	3,450	550	5,200	9,200			9,200
	4199	Sub-total	3,450	550	5,200	9,200	0	0	9,200
	4200	Non-expendable equipment							
	4201	Computers/ Laptops 5 Unit	9,000			9,000			9,000
	4202	Projector 2 Unit	3,500			3,500			3,500
	4203	Printer 2 Unit	3,500			3,500			3,500
	4299	Sub-total	16,000	0	0	16,000	0	0	16,000
	4300	Premises							
	4301	Office rent	13,025	955	9,845	23,825			23,825
	4399	Sub-total	13,025	955	9,845	23,825	0	0	23,825
4999	Component total		32,475	1,505	15,045	49,025	0	0	49,025
50	MISCELLANEOUS COMPONENT								
	5100	Office costs							
	5101	Communication	4,500	750	4,750	10,000			10,000
	5102	Banking costs							0
	5103	Other services (tel/fax, electricity/heating, maintenance)	6,500	500	7,769	14,769			14,769
	5199	Sub-total	11,000	1,250	12,519	24,769	0	0	24,769
	5500	Evaluation							
	5501	Midterm Evaluation				0	20,000		20,000
	5502	Terminal Evaluation				0	30,000		30,000
	5503	Audit Service Fee				0		8,281	8,281
	5599	Sub-total	0	0	0	0	50,000	8,281	58,281
5999	Component total		11,000	1,250	12,519	24,769	50,000	8,281	83,050
99	GRAND TOTAL		442,660	629,550	245,600	1,317,810	50,000	136,781	1,504,591

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used

by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agency is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).