



ROADMAP TO GEORGIA'S LONG TERM LOW EMISSION DEVELOPMENT CONCEPT



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Abbreviations

- BTR** - Biennial Transparency Report
- CSAP** - National Climate Change Strategy and Action Plan
- EnC** - Energy Community
- LTS** - Long-term Strategy
- LT-LEDS** - Long-term Low Emission Development Concept
- NAP** - National Adaptation Plan
- NDC** - Nationally Determined Contribution
- NECP** - Integrated National Energy and Climate Plan
- SECAP** - Sustainable Energy and Climate Action Plan
- TAP** - Technology Action Plan
- TNA** - Technology Needs Assessment
- WOM** - GHG Emissions Baseline Scenario, Without Measures
- WEM** - GHG Emissions Scenario with Existing Measures
- WAM** - GHG Emissions Scenario with Additional Measures

Introduction

Georgia, as a party to the United Nations Framework Convention on Climate Change (UNFCCC) and Paris Agreement, joins the international efforts to mitigate anthropogenic climate change and achieve climate neutrality by 2050. This goal is declared in Georgia's Long-Term Low Emission Development Concept (hereinafter "the concept"), adopted by the Government of Georgia in 2023.¹ In addition to achieving climate neutrality, Georgia also needs to be prepared to adapt to climate change.

Low-emission development, adaptation to climate change and transition to green economy are crucial aspects of the EU-Georgia Association Agreement and UN 2030 Agenda for sustainable development (Sustainable Development Goals). The EU aspiration to climate neutrality is reflected in the EU Green Deal adopted in 2019, which envisages transformation of all sectors of economy. As Georgia moves towards EU integration, it is prepared to transform its economy based on the principles of social justice and inclusive development. Granting of the EU candidate status to Georgia further strengthens country's aspiration in this direction.

This roadmap was prepared for effective implementation of Georgia's Long-Term Low Emission Development Concept. It includes the main steps and implementation principles for achieving the goals by 2050. It provides analysis of existing political, legislative, and institutional environment and review of policy instruments and technologies required for low emission development. The roadmap emphasizes financing strategies and the importance of just transition, gender equality and social inclusion. The document also outlines strategies for effectively communicating defined goals and outlines the roles and responsibilities of all segments of society in shaping a sustainable future.

The roadmap is based on the analysis of drawbacks and barriers to achievement of target indicators set by Georgia's Long-Term Low Emission Development Concept. The analysis was conducted with meaningful participation of stakeholders.

1. Georgia's Long Term Low Emission Development Concept (2023). Available at the link:
<https://www.undp.org/ka/georgia/publications/georgia-low-emission-development-strategy-2050>

Objective and Targets



According to Georgia’s Long-Term Low Emission Development Concept, Georgia should achieve **climate neutrality** by 2050. Climate neutrality is zero difference between greenhouse gas emissions and the emissions that are removed through absorption. Climate neutrality should be achieved along with economic development and population growth. Climate neutrality is also related to implementation of climate change adaptation measures and the readiness of the country to cope with the challenges arising during climate change. Hence, **achievement of climate neutrality by Georgia, along with strengthening the adaptation potential and climate resilience, represents key objective of the country’s climate change policy.**

The calculations and forecasts made during preparation of the concept shows that achievement of climate neutrality by 2050 is a difficult task for Georgia, so the concept provides development visions by decades and respectively, intermediate objectives. Intermediate target indicators for the decades are based on calculations, which refers to forecasted indicators in each sector with consideration of WOM, WEM and WAM according to the country’s pessimistic and optimistic development trajectories. Achievement of climate neutrality is possible only through additional measures. These visions, as well as long-term vision of the concept, should be bases for ten-year climate change strategies.

Table 1 - Intermediate target indicators of national GHG emissions (Gg CO₂-eq. Including forest sector) for 2030, 2040 and 2050 for optimistic and pessimistic development scenarios, with WEM and WAM.

SCENARIOS		2030	2040	2050
WEM	Optimistic	14,879	18,839	24,736
	Pessimistic	14,141	16,043	19,134
WAM	Optimistic	9,396	5,892	-20
	Pessimistic	9,334	5,362	-801

Source: Georgia’s Long-Term Low Emission Development Concept

It should be considered that the Concept until 2030 is based on Climate Change Strategy 2030 and Action Plan (2021-2023). Intermediate target indicators are not set by the Concept, which provides flexibility in the current changing environment. The faster the transition process commenced the more realistic would-be the achievement of climate neutrality objective. It is noteworthy that because of Energy Community, EU Commission and Government of Georgia (GOG) consultations,

new GHG reduction target indicator was defined for Georgia for 2030, which envisages reduction of greenhouse gases by 47% as compared to the level of 1990 including land use, land use change and the forestry sector (LULUCF). In addition, Georgia, as a member of Energy Community, is committed² to prepare Long-Term Strategy (LTS) with 30-year outlook, which would be in line with climate neutrality goal of the Energy Community. This would enable Georgia to upgrade existing concept with LTS.

Climate neutrality concept refers to fast and major technological improvements in the following sectors: energy, buildings, transport, industry, agriculture, land use and forestry, waste. The following directions are defined for each of the above sectors:

Energy



- Development of renewable energy sources and modernization of energy infrastructure
- Introduction of energy efficient technologies
- Introduction of technology for reduction of fugitive emissions

Buildings



- Improvement of energy efficiency of existing buildings, integration of renewable energy technologies
- Construction of energy efficient and nearly zero-emission buildings with integration of renewable energy technologies
- Introduction of energy certification schemes for buildings

Transport



- Development of transport infrastructure (road transport, railway, cable car, maritime and air transport) including pedestrian, bicycle, minibike, electric vehicles, etc.
- Introduction of smart technologies and Artificial Intelligence (AI) to reduce travel time and traffic jams
- Improvement of parking policy
- Development of energy efficient and clean energy public transportation system
- Increase share of energy efficient and clean energy vehicles in car park, including through introduction of financial support schemes
- Developing renting service for private travel
- Restriction on import of least effective vehicles, enhance average effectiveness of the car park
- Improvement of fuel quality, adoption of EURO 6 standard by 2030 and EURO 7 standard by 2040
- Support to railway travel and freight turnover

2. Governance Regulation (EU) 2018/1999, Article 15

- Introduction of eco-driving courses for drivers and awareness raising
- Support to production of bio-diesel

Industry



- Support to climate friendly production, promotion of participation in emission trading schemes
- Introduction of resource efficient and alternative energy technologies in manufacturing, support to and introduction of innovative technologies and know-how
- Introduction of circular economy principles and technologies
- Developing climate labelling system for industrial products

Agriculture



- Introduction of climate-smart practice in farming
- Restoration of degraded land and increase productivity of existing farmland and pastures
- Support to increasing yield of agricultural land and intensify crop processing
- Introduction of practice for reducing methane emissions from enteric fermentation in farms
- Reduction of methane emissions from manure processing
- Reduction of direct and indirect Nitrous Oxide emissions from agricultural soils

Land use and forestry



- Implement the principles of climate-smart, high-tech, sustainable management of croplands
- Implement sustainable land management practices
- Support to sustainable urban planning
- Systemic forest inventory
- Implement sustainable forest management principles, maintain and improve the quantitative and qualitative indicators of the forest

Waste



- Support to waste reduction and processing by introduction of modern technologies and practices, improvement of data collection
- Introduction of sustainable waste management practices
- Closure of unmanaged and ad-hoc landfills in the country and ensure sustainable waste management, development of regional landfills equipped with modern installations throughout the country
- Improve wastewater management: construction of new water treatment facilities, etc. Introduction of methane gas recovery technologies
- Introduction of sustainable composting practice.

Instruments for Achieving the Strategic Goals



Policy and Legislative Framework

The political foundation for Georgia's Long-Term Low Emission Development Concept is its membership in the UNFCCC and its commitments under the **Paris Agreement**. Since 1994, Georgia has been a member of the UNFCCC as a non-Annex 1 country. Georgia actively fulfills all commitments and participates in all ongoing processes under the convention.

In 2015, Georgia signed Paris Agreement and submitted Intended Nationally Determined Contribution (INDC) document and in 2021 it submitted updated Nationally Determined Contribution (Updated NDC). According to this document Georgia is unconditionally committed to limiting its domestic total GHG emissions to 35% below the 1990 level by 2030 and to 50-57% in case of international support.³ **Climate Change Strategy** (to 2030) and **Action Plan** (2021-2023), which would be updated in every 2 years, were prepared based on the NDC. The strategy contains detailed target indicators and measures for respective sectors.

Climate change related targets are also provided in sector strategies (Integrated National Energy and Climate Plan, NECP) and municipal strategic documents (Sustainable Energy and Climate Action Plan, SECAP). **National Adaptation Plan** (NAP) is being prepared.

In 2023, in line with Paris Agreement,⁴ Georgia's Long-Term Low Emission Development Concept⁵ containing long-term vision for achieving climate neutrality, was adopted.

Besides, under the Paris Agreement Georgia has commitment to report on GHG inventory, NDC progress and adaptation in every two years. At present, Georgia is preparing various documents on national climate policy with the following timeline:

- Update of Nationally Determined Contribution (NDC) - in every 5 years
- National Adaptation Plan (NAP) - in every 5 years

3. Georgia's Updated Nationally Determined Contribution (2021). <https://mepa.gov.ge/Ge/Files/ViewFile/50125>

4. Article 4, Paragraph 19 of the Paris Agreement: [a]ll Parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2 considering their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.

5. The concept was prepared in accordance with Ordinance 629 of the GOG (20/12/2019) on Approval of Regulation for Preparation of Policy Documents, Monitoring and Evaluation. Therefore, due to long-term (over 10 years) vision, it is called concept instead of strategy. <https://matsne.gov.ge/ka/document/view/5788653?publication=0>

- National Climate Change Strategy - in every 10 years
- National Climate Change Strategy and Action Plan (CSAP) – in every 2 years
- Long Term Strategy with 30-year outlook (LTS) – in every 10 years
- National Environmental Action Programme (NEAP) - in every 4 years
- Biennial Transparency Report (BTR) - in every 2 years
- National Communication under the UNFCCC - in every 4 years
- Integrated National Energy and Climate Plan (NECP) - in every 10 years after 2033
- Municipal Sustainable Energy and Climate Strategies - in every 10 years

Climate related issues in Georgia are regulated by **national legislation** along with international agreements and treaties. The right to live in a healthy environment is acknowledged by Georgia's constitution (Article 29). Law of Georgia on Environment Protection and other normative acts regulates environment protection issues.

Work is undergoing on **Climate Change Law** in order to complete legislative and policy framework. The law would establish a framework for planning and implementation of climate change mitigation and adaptation measures. “White Book” of Climate Change law confirms Georgia's long-term low emission objective – achievement of climate neutrality by 2050 and strengthening its adaptation potential. The Climate Change Law would ensure monitoring of achievement of these objectives as the monitoring would be conducted at the parliament level through new entities – **Parliamentary Council on Climate Change (PPCCC) and Climate Change Consulting Group**.

White Book of the Climate Change Law envisages introduction of different instruments, including:

- Parliamentary monitoring progress of achievement of target indicators set by NDC.
- Establishment of sustainable and effective Monitoring, Reporting and Verification (MRV) system.
- Georgia's emissions trading system would be established, and it would comply with the principles and approaches set by the EU Emissions Trading System.
- Introduction of the Carbon Border Adjustment Mechanism (CBAM) in Georgia. The Carbon Border Adjustment Mechanism operates in parallel to the Emission Trading System (ETS) and reflects effects of the emissions trading scheme for non-EU producers and extends use of the emissions trading scheme. In Georgia, the Carbon Border Adjustment Mechanism would encourage enterprises, especially those focusing on exporting to the European market to take emission reduction measures.
- Measuring emissions related to goods and services produced in Georgia as well as imported goods and services.
- Development of institutional capabilities and support to disaggregated data gender analysis and consulting process – forecasting harmful results of climate change, strengthening response mechanisms for extreme weather events, and slowly progressing events in order to avoid or minimize loss and damage.

- Obliging Municipalities to create and implement local climate change strategies, which contains climate change mitigation, as well as adaptation plans. This will be obligatory also for those Municipalities, which are not signatories to the Covenant of Mayors for Energy and Climate.
- A Just Transition Fund that will support businesses, municipalities, communities, employees, and all members of society during the transition to a green economy, ensuring gender equality and social inclusion.

Institutional Arrangement

Government of Georgia is responsible for the creation of climate change policy and international reporting. Key policy maker in this field is **the Ministry of Environmental Protection and Agriculture of Georgia. Environment and Climate Change Department** of the Ministry, specifically, its Climate Change Division works on this issue. LEPL National Environment Agency under the Ministry is responsible for data collection, systematization, analysis, identification of trends and making forecasts. Besides, there is a Legal Entity of Public Law (LEPL), **Environmental Information and Education Center** whose key objectives are: support to environmental and agrarian education of public and enhancement of awareness, organization of public discussions and ensuring access to environment protection and agrarian information. The Center also provides administrative support for preparation of reports to be submitted to UNFCCC.

Line Ministries also have important role in preparation and implementation of climate change policy, including Ministry of Economy and Sustainable Development of Georgia, Ministry of Regional Development and Infrastructure, Ministry of Finance, Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs of Georgia, Ministry of Education and Science. National Statistics Office of Georgia (GeoStat) plays an important role with regard to data accessibility. National Bank of Georgia carries out sustainable financing policy and Ministry of Finance manages climate change related financial resources. The Ministry of Internal Affairs, through its Emergency Management Department, is involved in management of emergencies caused by extreme climate conditions.

In 2021 **Climate Change Council**, a high-level advisory body was established for mitigation of climate change, creation of adaptation policy and coordination of its implementation. The council consists of members of GOG – Ministers, Chairperson of Abkhazia Autonomous Republic, Chairperson of the Coordination Group and Executive Director of National Statistics Office of Georgia, LEPL. The Minister of Environment Protection and Agriculture is Chairperson of the Council. Representatives of those Municipality Coordination Groups and Working Groups, which are signatories to the Covenant of Mayors, are also Council members.

Coordination Team is an advisory body for the Council on climate related coordination issues between central government and self-government agencies. It consists of mayors, which

are signatories to the Covenant of Mayors, deputy Mayor of Tbilisi Municipality and State Representatives.

Working Group is an advisory body on economy and social fields for working on specific issues of climate change policy. It consists of public officials, experts, and representatives of academia. The Council establishes the Working Group, and it approves its members.⁶

According to the draft Law on Climate Change **Parliamentary Council on Climate Change (PPCCC)** and its subordinate entity **Climate Change Consulting Group** would be added to the existing institutional framework. The PPCCC would consist of Chairpersons of respective Parliamentary Committees, MPs, invited experts and representatives of civil society, including representatives of national climate platform and it would guarantee that Georgia would take just and effective measures for climate change mitigation and adaptation in order to ensure sustainability. It would be responsible for participation in preparation of climate change policy and monitoring implementation of the policy, monitoring of emissions reduction as well as ensuring involvement of stakeholders and society.

The Council would establish a Climate Change Consulting entity, which would consist of climate change and other specialists. It would provide advice, analysis and information to the Council and the Government. It would be responsible for regular reporting on reduction of GHG emission and achievement of the ultimate goal, as well as on progress of adaptation and just transition, on failure analysis and preparation of recommendations for future strategic plans, and preparation of recommendations in case the Government plans to change long-term objectives / target indicators or mandatory list of GHG.

Introduction of Climate-Technologies

Development and introduction of clean, innovative, and sustainable technologies is of critical importance for achieving long-term goals of the Concept. Climate-technologies include climate change mitigation technologies, as well as technologies for adaptation to climate change. In the era of swiftly developing new technologies establishment of flexible and dynamic innovative environment by countries is of utmost importance as it would support to accelerated introduction of advanced technologies, their adaptation and widespread use; development of new technologies is important with regard to climate change mitigation as well as to adaptation to it. Constant monitoring of the technologies and establishment of sound system for coordinating stakeholders

6. Ordinance of GOG on Creation of Climate Change Council. <https://www.matsne.gov.ge/ka/document/view/4780380?-publication=0>

interested in technological development is important. This would promote research, introduction, and local development of innovative modern technologies, including climate-technologies. In this regard, the establishment of institutional, political, and financial mechanisms is crucial. A sustainable process should be in place with participation of representative from Government, business associations, academia, research, and analytical centers, which would make it possible to collect, disseminate and use respective information and knowledge for development of technologies.

Technological transition is a lengthy process, and this Roadmap establishes gradual approach by decades, which is in line with long-term vision of the Concept:

I - 2021-2030 Decade

Improvement of enabling environment and upgrading of climate technologies

According to the Concept, the decade of 2021-2030 is considered as technological re-equipment decade, which should commence the entire process of importing-introducing climate-technologies until 2050 and should ensure success of this process. In order to ensure the above, technology introduction and innovation support mechanisms should be improved, existing barriers should be removed and facilitating environment enhanced, which would create stable basis for incessant technological development in the decades to follow. This is a complex and systemic task and requires simultaneous activities in various directions, specifically:

- **Creation of policy framework for technological development**, which would prioritize development and introduction of sustainable technologies. Georgia has already clearly defined targets for development of renewable and energy efficient technologies. The National Adaptation Plan is being prepared and it would also define target technologies for adaptation. Information should actively be provided to representatives of the executive branch and capabilities should be enhanced with regard to climate change and directions needed for technological development. Enhancement of political readiness for state support to climate technologies is important.
- **Vision of the national climate-technologies system should be considered in Georgia's innovations and technology policy.** Discrepancies with the vision should be identified and the implementation plan should be put together. Evaluation and monitoring of existing facilitating environment and institutional mechanisms, professional knowledge and capabilities is required in order to further improve them. Creation of standard technological innovation system of developed countries should be started with high-

level political involvement and private business participation. Increase share of research and innovation expenditure to the level of developed countries by 2030.

- **Identification of climate-technologies and analysis of barriers.** Identify priority climate-technologies and respective barriers in certain sectors. Under the Georgia's 3rd Climate-Technologies Needs Assessment, which was carried out during 2021-2023 in parallel to preparation of low emission development concept, two documents were created: Georgia's Climate-Technologies Needs Assessment (TNA) and Technology Action Plan (TAP), with detailed research of important technologies for each sector and for the sectors, which were assessed as priority sectors (energy, buildings, transport and agriculture) barriers to the technologies, stakeholders and conditions and measures required for implementation were also researched in detail.
- **Overcoming barriers to transferring climate-technologies and development of facilitating environment.** Identified legislative, institutional, and other barriers should be removed gradually. Creation of facilitating environment for introduction of the technologies refers to: organizing legislative basis; strengthening finance sector with regard to management of risks related to financing the technologies; development of appropriate infrastructure for new technologies; training of personnel with skills and knowledge required for operationalization and functionalization of the technologies; and creation of service center, which would provide spare parts and craftsmen.
- **Support to climate-technologies Research and Development (R&D).** Public as well as private sector R&D initiatives focused on already identified priority sectors should be promoted. Participation in advanced European and international research (Horizon Europe, LIFE, COST and other programs). Transfer of technological expertise to the university base and start working on its development. Implementation of pilot projects, testing of technologies, preparation for future widespread introduction. Dissemination of pilot projects' experience and informing stakeholders.
- **Support to public-private partnership for development of climate-technologies.** Cooperation among government, academia and private sector should be strengthened through public-private partnership. The partners can use each sector's strengths for acceleration of development, commercialization, and introduction of technologies.
- **Transfer of technologies and strengthening capabilities.** Technology transfer and knowledge sharing between local and international stakeholders should be facilitated. Support cooperation with global partners, including technology transfer treaties, joint research projects and participation in international innovative programs. At the initial stage, priority should be assigned to importing such climate-technologies, which would make it easier to import-introduce other technologies. Enhancement of technical and technological knowledge in priority directions. Training of professional personnel

(technicians and fitters). Capabilities and technical provision of professional and educational institutions should be enhanced. This also includes new curricula, skills development initiatives and educational campaigns for awareness enhancement and support to sustainable practice. This process should be permanent, which requires establishment of training centers, defining standards and establishment of certification process. Training and certification system would also support training of personnel for technology service centers, which would provide spare parts and artisans for new technologies to ensure management of emergencies and eradication of damages.

- **Creation of environment facilitating entrepreneurship and innovation in the field of sustainable technologies.** Innovative hubs, incubators and accelerators should be developed in order to support start-ups and small and medium-sized businesses, which are working on green technology solutions. Participation in global initiatives, best practice sharing, and use of international financing mechanisms should be increased to support national endeavors.
- **Creation of market mechanisms to strengthen demand for sustainable technologies.** This means not only consumer education and awareness enhancement campaigns, but also green public procurement policy and certification schemes, which stimulate use of ecologically clean products and services.
- **Introduction of technologies monitoring and evaluation mechanisms** for analyzing effectiveness of progress. Policy and programs supporting climate-technologies should be regularly reviewed and updated in a coordinated manner, based on stakeholders' opinions and lessons learned.

It is noteworthy that work in these directions should be intensified during this decade, and it should be continued in future decades as well.

II - 2031-2040 Decade

Deployment of climate-technologies on the market and further improving the technology development system

During this decade, the process of importing and introducing new technologies would be carried out intensively based on the work undertaken during previous decade. The processes started in the previous decade would be continued and strengthened; regulations against ineffective technologies would become stricter. State financing of research and development would be increased.

It is expected that GHG emissions would continue to increase until the middle of 30-ies and reducing trend would be maintained afterwards. This complies with the Paris Agreement and the EU vision with regard to the trajectory of reduction of emissions, according to which **the maximum amount of emissions should be reached as early as possible**.

It is assumed that the monitoring and evaluation system is operational during this decade and it is possible to add new technologies and/or modify existing ones, which is reflected in *Biennial Transparency Reports* on required support.

III - 2041-2050 Decade

Development of local production along with transfer of climate-technologies

This decade is characterized by innovations and constant improvements. Existing strong technology development system supports further innovative development of climate-technologies, consistent investments in research and development for increasing effectiveness of climate-technologies, reduction of costs and overcoming existing challenges. Local production of climate-technologies is developed, and technology-licensing mechanisms are established.

Monitoring of achievement of new technologies and informing stakeholders continues, as well as participation in advanced European and international research. Improvement-development of existing technologies will be further increased through research institutes and universities. State financing of research and development will be increased to the level of financing in developed countries.

Effective, energy saving, clean and climate-friendly technologies will ensure achievement of climate neutrality goals and steady decline of GHG in parallel to population and economic growth. Climate change adaptation technologies and practices will facilitate enhancement of climate resilience of the country. Sustainable monitoring and evaluation system will ensure transparent reporting of achievement of climate neutrality as well as adaptation target indicators.

Financing Sources

Climate finance includes all activities, which can be classified as activity for climate change mitigation and/or adaptation to it. **Georgia's Long-Term Low Emission Development Concept includes strategic outlook for climate financing**, describing main directions and measures of climate change mitigation policy with respective budgets, as well as information on international and local sources of finance.

Draft Law on Climate Change⁷ considers strategic finance outlook set out in the Concept and defines the following principles for effective climate financing:

1. accurate and transparent monitoring of the public expenditures related to climate change, including costs related to mitigation, adaptation, and extreme weather events
2. establishment of enabling environment for climate investments
3. enhancement of public-private partnerships for low-emission and climate-resilient development.

The Roadmap provides key principles, sources, and milestones for implementation of long-term low emission outlook. Georgia's key objective is to increase climate finance for achieving climate change policy goals, which would support to sustainable and climate tailored development of the country.

The concept provides clear conclusion supported by respective calculations, that certain level of emission reduction and ultimate goal – achieving climate neutrality by 2050, can only be achieved with implementation of additional measures in each sector (so called WAM scenario). According to sector experts, financial resources required for implementation of WAM scenario of the concept amounts to about USD 78 billion. This necessitates attraction of additional financial resources for financing these measures.

Finance and investment mechanisms of climate change are part of finance policy as it is virtually impossible to implement significant transitional projects without using financial resources. States have an important role in forming finance and investment mechanisms. As financial resources of state are restricted, it should facilitate attraction of private investment for climate change activities, create effective systems of green capital market and support flow of financial resources among stakeholders, which would improve intense and effective financing of climate change activities in the country.

Climate finance can be attracted from public, private, national, international or any other sources (mixed, charitable, etc.), which would be directed towards strengthening country's capabilities and preparation of effective project proposals for implementation of climate change related projects, creation of beneficial environment for introduction of clean, innovative, and modern

7. White Book for Climate Change Law, Article. 2.2.7 Climate Finance

technologies, development of sustainable system of monitoring, reporting and verification. Private sector involvement and public-private partnership are of vital importance for the development of sustainable climate finance system. Co-financing and involvement of stakeholders in research and innovations and flexibility of finance system represent important characteristics of sustainable finance system.

There are already certain reporting obligations with regard to climate change activities, which stem from the global process of UNFCCC and Paris Agreement and national commitments:

- According to the Paris Agreement (PA) each developing country should submit information on needed and received financial support in biennial transparency report.
- At budget planning level Georgia's ministries should define relevance of their programs and sub-programs with climate change through policy classifier provided by electronic budget in coordination with the Ministry of Environmental Protection and Agriculture (this is known as climate budget tagging). Climate Change Law will require the government to continue climate budget tagging practice, in order to measure public climate expenditures for the next fiscal year. Also, it requires that the government should share information on climate change related public expenditures for previous fiscal year(s) at least in every two years.
- Climate Change Finance / Financing Working Group was established at National Climate Change Council. This group prepares an assessment of climate change impact on economic activity, climate change related cost-benefit analysis and respective recommendations.

The PA identifies the following principal issues with regard to climate change finance: Leading position of developed countries with regard to finance mobilization, increasing ambition and balanced distribution of finance resources to mitigation and adaptation directions, transparency and accountability related to issued and received assistance. Creation of public, private and innovative climate finance mechanisms altogether would support effective achievement of low emission development goals.

Finance for climate change activities in Georgia is accessible through **i) private finance channels, ii) national and municipal budgets, local funds, and incentive schemes; and iii) international bilateral and multilateral cooperation and investment on climate change issues.**

Bilateral international finance mechanisms refer to transfer of resources from a country's agency directly to the recipient country. Accounting and monitoring of direct or indirect bilateral finance for achievement of climate change goals is carried out by OECD "Rio Markers". According to OECD's statistics database of climate related finance, several climate related projects undergoing in various sectors in Georgia receive assistance from 19 members of Development Assistance Committee (DAC) 19.⁸

8. Georgia received in total GEL 5.17 billion as climate change financial assistance during 2010-2019 through bilateral finance mechanism. Final version of NDC Financing Strategy and Investment Plan, technical report, 2022. <https://www.undp.org/ka/georgia/publications/eu4climate-ndc-financing>

Resource supply through **multilateral international finance mechanisms** is carried out from such international organizations, which were established for achievement of specific goals and are managed and financed through cooperation of many countries and financial contributions.⁹ There are several international climate change funds established under UNFCCC aiming at financing climate change mitigation and related adaptation measures. Out of UNFCCC's climate funds the following operate in Georgia: **Adaptation Fund (AF)**, **Green Climate Fund (GCF)** and **Global Environment Facility (GEF)**. Multilateral funds, which are not established under UNFCCC but finance climate change in Georgia are as follows: Eastern Europe Energy Efficiency and Environment Protection Partnership Regional Fund (**E5P**), **European Fund for Sustainable Development (EFSD)** and **Green Growth Fund (GGF)**.

International Financial Institutions¹⁰ (IFI) established by more than one country operate in various fields, including provision of financial capabilities in climate change process.

Multilateral development banks operate in many countries, including Georgia. They provide financial resources obtained at international financial markets as a loan to member countries with favorable conditions compared to finance markets. IFIs and development banks actively financing climate change projects in Georgia are the following: **European Investment Bank (EIB)**; **Council of Europe Development Bank (CEB)**; **European Bank for Reconstruction and Development (EBRD)**; **Asian Development Bank (ADB)**; **Black Sea Trade and Development (BSTDB)**; **Nordic Investment Bank (NIB)**; **Nordic Environment Finance Corporation (NEFCO)**; **International Fund for Agricultural Development (IFAD)**; **the World Bank Group**.

The World Bank Group works on poverty reduction, increase of general welfare and support to sustainable development through the following five institutions: **International Bank for Reconstruction and Development (IBRD)**; **International Development Association (IDA)**; **International Finance Corporation (IFC)**; **Multilateral Investment Guarantee Agency (MIGA)**; **International Center for Settlement of Investment Disputes (ICSID)**.

Georgia ensured financing and co-financing of several climate related projects with internal **national resources** obtained from the country's budget system. There is no specific fund in Georgia, which would support implementation of climate change related activities. In spite of this, several state funds divert national and international financing towards sustainable development projects. These are: **Georgian Energy Development Fund (GEDF)**; **JSC Partnership Fund**; **Municipal Development Fund (MDF)**; **Georgian Regional Development Fund (GRDF)**; **Georgian Co-investment Fund**.

Public-private partnership is a core element of finance and investment mechanisms. It establishes and strengthens trust, which is a decisive factor for achieving success.

9. During 2010 - 2019 total amount of assistance for implementation of 36 climate change related projects in Georgia was GEL 2.19 million. Final version of NDC Financing Strategy and Investment Plan, technical report, 2022.

10. From 2010 to 2022 Georgia received GEL 28.36 billion from International Financial Institutions in the form of financing of climate related projects. Final version of NDC Financing Strategy and Investment Plan, technical report, 2022

It is necessary to establish **sustainable climate financing system**, which would envisage integrated mobilization of local, national, international finance and contribute to climate change mitigation, adaptation to climate change and low emission development.

Abidance by the following principles assures sustainability and effectiveness of low emission development financing system:

- diversification of financing sources (public, private, international)
- involvement of all stakeholders and support to substantial equality (financing will provide benefits for all segments of society, prioritizing projects, which provide social and economic equality)
- compliance of financing with national and regional priorities of the country
- mitigation of risks and support to insurance
- support to public-private partnership
- support to research and technological innovations, strengthen capabilities, ensure transparency and accountability
- creation of financial structure, which is flexible and easy adaptable to changing environment
- long-term vision in the process of climate financing
- Introduction of sustainable financing instruments and strengthen international cooperation.

By abiding these principles, the country can create a finance system, which would ensure effective achievement of climate change policy objectives. Specifically, the following is required for development of sustainable climate finance system in Georgia:

- Define respective budgets for mitigation and adaptation measures in sectoral strategies and action plans, identification of financing sources, and implementation.
- Climate budget tagging. Endsure accurate collection and analysis of data on climate related public expenditures in order to avoid over or under estimation.
- Identification of activities, which are harmful for climate and respective investments.
- Establishment of climate change finance and investment mechanisms with sound finance monitoring, reporting and verification elements, which would be used to check effectiveness of climate projects' implementation.
- Creation of long-term platform for dialogue on green financing among finance sector players (Ministry of Finance, National Bank, commercial banks, funds, various financial intermediaries/ institutions).
- Strengthen role of finance sector in sustainable development through creation of sustainable financing framework. (Sustainable Finance Taxonomy, ESG issues).
- Creation and introduction of analytical models for climate/green financing.

- Creation and introduction of various types of green financing instruments, such as green obligations, investments, funds, mortgage, micro-financing, leasing, green certificates, carbon credits and market, green insurance, etc.
- Strengthen public-private partnership for low emission and climate resilience development.
- Creation of credit guarantee schemes supported by the state.
- Development of local verifiers and certifiers of green finance products.
- Creation of educational programs and curricula for climate / green finance.
- Increase the number of accredited institutions of international climate funds.

Educational Programs

Educational programs are crucial for the successful achievement of the goals outlined in the Long-Term Low Emission Development Concept. Well-designed curricula at all levels of education, including pre-school, school, vocational, and higher education, are essential for equipping individuals and institutions with the knowledge and skills needed to promote sustainable practices.

Supporting education on climate change is crucial for formal and informal environmental protection education. Educational and teaching programs should be systematically developed at different stages of learning. This includes preparing a climate change teaching plan for schools, supporting extra-curricular activities, strengthening awareness campaigns, developing higher education and vocational programs, increasing the number of research centers and institutes, improving internship and on-the-job training capabilities, and providing continuous educational seminars and online courses for professionals, policymakers, and stakeholders.

With regard to formal education, the role of universities in climate change study and research should be noted. While climate-related issues are partially integrated into the curricula of environment protection-related programs like hydrology, geology, and ecology, there is a need for wider integration in fields such as energy, construction, agriculture, transport, and others.

The Rustaveli Research Fund, under the Ministry of Education, Science, Culture, and Sport, plays a significant role in supporting research in Georgia. The Fund is dedicated to advancing science, technology, and innovation systems in the country.

In terms of informal education, the roal LEPL Environmental Information and Education Center of the Ministry of Environmental Protection and Agriculture should be acknowledged. Training courses, contests, public lectures, seminars, and conferences on climate change issues organized by donor-funded NGOs or research groups are also crucial. It's important to note, however, that these activities are often conducted irregularly, creating sustainability challenges for such courses and programs.

A national strategy “Education for Sustainable Development” and a corresponding action plan have been prepared by the Environmental Information and Education Center, although the document has not yet been approved. The lack of emphasis on climate change educational programs in key strategies like the Unified National Strategy of Education and Science 2022-2030 and the Vocational Education Reform Strategy 2013-2020 highlights a gap that needs to be addressed to ensure comprehensive and effective education on sustainability and climate change.

Gender sensitive and inclusive educational programs should be prepared at all stages of education for effective fulfilment of climate change mitigation as well as adaptation objectives. The following steps should be made to achieve this:

- The importance of preparing and introducing educational programs related to climate change mitigation and adaptation should be highlighted in both the Unified National Strategy of Education and Science and the Vocational Education Reform Strategy. These programs should outline specific objectives and measures for integrating climate change education at various stages of learning. Additionally, it would be beneficial to incorporate key findings and objectives from the document on Education for Sustainable Development. This holistic approach can help ensure that climate change education is comprehensive and effectively integrated into the education system.
- Considering complexity of climate change issues, it is necessary to integrate climate change related educational and professional skills development / training programs in the sector strategies and to define specific objectives regarding required skills and knowledge, which would be identified and analyzed at just transition process. These sectoral educational programs must comply with Unified National Strategy of Education and Science and Vocational Education Reform Strategy. Involvement of private sector in preparation of vocational education programs to the extent possible so that personnel could be trained in coordination with private sector to ensure their employment afterwards.
- Existing research centers and institutes should be developed, and new ones should be established. These centers and institutes should be focused on research of climate change, mitigation and adaptation, green transition, and sustainable development issues.

Just Transition

Policies aimed at achieving Georgia’s long-term low-carbon development goals have significant social impacts. Therefore, ensuring a just transition to a green economy and a fair distribution of the costs and benefits of climate change policies are of particular importance.

According to the draft Law of Georgia on Climate Change “The principle of just transition refers to the involvement of persons who have been directly or indirectly disadvantaged by response measures to climate change, including decarbonization [transition to low-emission development], as well as persons and groups with special needs, and the protection of their interests in the planning and implementation of response measures. Just transition means minimizing possible negative socio-economic impacts of climate change policies, taking appropriate measures to protect persons or groups disadvantaged by the response measures, including the creation of dignified [and quality] jobs and the provision of equitable access to new opportunities arising as a result of low emission development”.

The successful transition to a green economy relies heavily on the effectiveness of the existing systems and mechanisms in the country, especially:

Social Policy - employment, labor rights, social protection – The unemployment rate in Georgia stands at 17% (GeoStat, 2022) while the share of informal employment¹¹ is 35%¹². In the context of a just transition, it is crucial to provide decent working conditions and focus on reducing and formalizing informal employment. The private sector plays a significant role in this process.

A significant share of the Georgian state budget is allocated to social protection (22.87%, 2022)¹³. 40% of the population is covered by at least one social protection benefit¹⁴, despite this, up to 20% of population lives below the poverty line (relative poverty)¹⁵. Protection from unemployment is a key in terms of just transition. However, there are no unemployment benefits in Georgia and no adequate minimum wage is set.

11. Informal employment – employment in the non-agricultural sector where workers not covered or insufficiently covered by formal arrangements through their work (didn’t pay income tax from remuneration; employed didn’t benefit from paid annual leave or employed didn’t benefit from paid sick leave in case of illness; or employer didn’t contribute to the pension fund) or employed defined her status in employment as a contributing family worker or the enterprises where they worked weren’t registered. (GeoStat)

12. Share of informally employed persons in non-agriculture employment, 2017-2019, GeoStat

13. National Statistics Office of Georgia <https://www.geostat.ge/ka/modules/categories/770/naerti-biujeti>

14. International Labour Organisation (2020). Assessment of the Social Protection System in Georgia, Available at: <https://www.developmentpathways.co.uk/wp-content/uploads/2021/02/ILO-Georgia.pdf>

15. National Statistics Office of Georgia <https://www.geostat.ge/ka/modules/categories/192/tskhovrebis-done>

Vocational education - employee qualification, training/re-training, life-long learning – According to the International Labor Organization (ILO) the skills match rate for Georgia is 66%¹⁶. The reason for the skills mismatch is mainly low quality and adequacy of vocational and higher education programs and excess number of higher education graduates.¹⁷ Higher education enrolment indicator is over 60%, while 40% of entry level jobs require higher education. Only 13% of employees work within their field of specialty. Only 6% of youth and 3% of students attend vocational programs, compared to 48% in the EU.¹⁸

In both the short and long run, decarbonization creates greater demand for mid-skill and low-skill workers with technical background. Key occupational gaps include skilled agricultural and craft workers which require secondary education and professional apprenticeship or on-the-job training.¹⁹

Social dialogue - Despite positive changes to the Labor Code, efforts to strengthen social dialogue at the national, regional, and industrial levels have not been successful.²⁰

Environmental justice and participation - While Georgia has a well-established legislative framework for environmental protection, enforcement is weak and fragmented due to limited administrative capabilities. This hinders the effective implementation of environmental policies.²¹

Vulnerable Sectors and Groups

The transition to a low-carbon economy can lead to a healthier environment, create new jobs, and ultimately foster economic development and well-being of citizens. However, it is essential to consider and address potential vulnerabilities that may arise in this process:

Possible vulnerability in **the energy sector** is related to **coal mining** and employment in this sector. It is crucial to establish the state's vision for the sector's future development. This vision should align with Georgia's low-emission development goals while also prioritizing the creation of decent working conditions. In addition, the **development of renewable energy sources** is a key component of Georgia's low-carbon development strategy, focusing on the use of hydro, solar and wind power. It is essential to involve local communities and take their interests into account in the planning and construction of infrastructure projects. It is also important to create well-paying, stable and

16. International Labor Organization (2019). Skills and jobs mismatch in low- and middle-income countries, Available at https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_726816.pdf

17. World Bank (2023). Georgia, Keeping the Reform Momentum. A Systematic Country Diagnostic Update, Available at: <https://openknowledge.worldbank.org/entities/publication/3230fca2-eb9b-4877-ac65-ba249ff8b8a5>

18. Galt & Tagart (2020). Georgia's Education Sector, Available at: <https://api.galtandtagart.com/sites/default/files/2021-05/25610.pdf>

19. NDC partnership (2023). Socio-economic impacts of Georgia's decarbonization pathway

20. Beltadze P. Social Dialogue in Georgia (2020). Available at: <https://library.fes.de/pdf-files/bueros/georgien/16267.pdf>

21. Vardosanidze, k., Kiss, C., (2023). Access To Environmental Justice In Georgia Baseline Assessment <https://www.undp.org/ka/georgia/publications/environmental-justice>

inclusive jobs, while ensuring occupational safety.

Transport sector: The accessibility of public transport, both in financial and technical terms, should be emphasized in the reform of the transport sector, especially in rural areas. Ensuring road and occupational safety is also a key consideration. Measures to reduce greenhouse gas emissions in the transport sector should not impose an additional financial burden on the population. The replacement of aging vehicle fleets should not impede intercity and intracity mobility. In addition, there should be an emphasis on improving the skills and retraining of people employed in the sector, and jobs should be inclusive and of high quality.

Buildings Renovation: energy efficient Low energy efficient efficiency of buildings in Georgia is a key factor causing energy poverty²² energy efficient It's essential that measures to enhance buildings' energy efficiency are accessible to energy-poor households, which may require establishing special funds and financing instruments. The renovation of buildings and measures to improve their energy efficiency mean the creation of new jobs and professions. In this process, it is important to train/re-train technical personnel, craftsmen, and energy auditors to work according to new standards and to formalize employment in this sector. This would support the improvement of working conditions and safety of people employed in the sector.

The introduction of energy efficient production processes and training of respective personnel is a crucial issue in the industry sector. Apart from personnel training/re-training, dignified remuneration and safe working conditions of employees is important for from just transition perspective. In addition, low emission development should consider compliance with social and ecological priorities.²³

The LT-LEDS concept includes the introduction of sustainable waste management practices as part of the transition to a low-emission and circular economy. This transition is expected to create new jobs in waste management facilities. Additionally, formalizing informal employment in waste collection and processing is crucial from a just transition perspective.

Agriculture and LULUCF: Formalization of informal employment and training of personnel for introduction of new technologies are especially important. Introduction of sustainable forest management practice requires just transition considerations. Improvement of working conditions and safety due to the reform is an important factor. However, at the same time the reform should provide employment and training/re-training opportunities for personnel unofficially employed in the sector.

From Just Transition perspective, Georgia's low-emission development should be guided by the following principles:

22. Kvaratskhelia T., Dubois U., (2024). Understanding Energy Poverty in Georgia

http://weg.ge/sites/default/files/final_understanding_energy_poverty_in_georgia.pdf

23. Tsintsadze G., (2022). Assessment of Draft Georgia's Low Emission Development Concept from Just Transition Point of View

- Socially just measures do not impose an additional **financial burden** on the population; instead, they help save money and improve living conditions.
- Socially just measures have a **positive impact on workplaces and working conditions**, while also creating new opportunities for employees in vulnerable sectors.
- Socially just measures ensure the **involvement of the population and local communities** in the decision-making process, taking into account best practices of co-participation.
- Socially just measures consider the needs of vulnerable groups when **making investments** to achieve climate neutrality goals, prioritizing support for these groups whenever possible.

Implementation of the following steps is important along with abidance with the mentioned principles:

- **Create legislative framework of just transition** by adoption of Climate Change Law.
- Incorporate just transition issues and analyze the impact of specific policy measures on vulnerable groups in **sectoral strategies and action plans**. These strategies should include a clear vision and a range of instruments aimed at minimizing any potential negative effects on these parties.
- **Establish Just Transition Fund**, which could be independent or integrated in other national funds.
- **Complete the process of Approximation of Georgia's legislation to that of EU** with regard to employment, social policy and equal opportunities defined by the Association Agreement, also with regard to prohibition of discrimination and safety. Ratification process for ILO conventions should be completed.
- Introduce appropriate **policy instruments** to implement existing legislation.
- **Improve social dialogue** and enforcement of environmental justice related legislation.
- **Improve Personnel re-training opportunities and vocational education programs**. Strengthening **cooperation with businesses** and enhancing on-the-job training practices are essential aspects of this effort

Gender Equality and Social Inclusion

Climate change has different impact on women, men, girls, boys, diverse gender identity and gender self-expression persons, groups, and communities with various specific needs (including persons with disabilities; children and elderly; ethnic, religious, sexual minorities; refugees, socially vulnerable persons, internally displaced persons, migrants, etc.). Especially women, persons, groups, and communities with specific needs experience climate related difficulties due to social, economic, and political inequality. Gender equality and social inclusion (GESI) is an important part

of effective implementation of Georgia's Long Term Low Emission Development Concept.

During implementation of the concept, gender equality could be achieved by starting to acknowledge the difference, which women and men experience and respond to climate change. Women, especially in developing countries, disproportionately experience climate change due to their role as caretaker and reliance on natural resources as income source. Climate change exacerbates existing gender inequality by restricting access of women and persons with various specific needs to services and resources, by restricting adaptation and mitigation opportunities and by lower representation in decision-making processes or complete exclusion from the process. In addition, women have unique knowledge and skills, which are crucial for resilience to climate change. Their contribution to household and community adaptation strategies, sustainable resource management and biodiversity conservation is invaluable. Strengthening of women and ensuring their participation in measures against climate change would make the policy more inclusive, efficient, and just. This means women's inclusion not only in the decision-making process, but also removal of systemic barriers, which restricts access, participation and leadership in economic sectors related to climate change.

Social inclusion comprises all groups with special needs, including disabled, children, youth, elderly, diverse gender identity and gender self-expression persons, etc. Knowledge, experience, needs and priorities should be integrated during implementation of the concept in order to ensure inclusion and efficiency.

Integration of gender equality and social inclusion during implementation of the concept requires diverse approaches, which means conducting gender and social analysis in order to identify specific vulnerability, capabilities, needs and priorities of various groups. As global society continues fight against climate change challenges, the road leading to sustainable future requires joint efforts using potential of each member of society, supports wider development objectives, including poverty reduction, improvement of healthcare system and sustainable economic growth.

Implementation of Georgia's Long-Term Low Emission Development Strategy with gender equality and social inclusion at national and local levels is based on the following principles:

1. Gender sensitive and inclusive policy – climate change policy and related initiatives should be gender sensitive and inclusive, tailored to the needs of all members of society. The objective of the policy should be reduction of gender inequality and support to substantial equality through removal of factors causing insecurity.
2. Intersectionality – acknowledges complex and interrelated nature of social characteristics, such as race, class, religion, sex, marital status, sexual orientation, ethnicity, specific need, etc., based on which people end up at different levels of power, privileges, discrimination and exclusion. Intersectionality approach acknowledges that gender is not isolated; it is interconnected with socially decisive factors for establishment of individual climate change experience.

3. Meaningful participation and representation – equal participation and representation of women and groups with specific needs in the climate change related decision-making process is crucial. This means creation of an inclusive platform for participants, removal of barriers to participation and active support to representatives at all levels.
4. Development and strengthening of capabilities – refer to development of capabilities of women and groups and communities with specific needs in order to develop skills and knowledge associated with climate change mitigation.
5. Access to services and resources – refers to creation of financial mechanisms to support priorities and initiatives of women and other groups with specific needs, which means gender budgeting and prioritizing financing of the projects, which meet gender specific needs and support sustainable income source of insecure population.
6. Data collection and monitoring – collection and processing of disaggregated data is crucial for identification of disproportionate impact of climate change and monitoring implementation of the concept. Disaggregated data creates a basis for informed decision-making and accountability.
7. Sustainable and inclusive economic growth – the concept should support economic opportunities, which would be accessible for everyone, especially for women and groups with specific needs in just transition processes. This includes investing in green working places, sustainable agriculture, and renewable energy sectors so that ensuring gender equality and social inclusion is a priority.
8. Resilience and adaptation – assurance of resilience and adaptation capabilities among women and groups with specific needs is crucial during implementation of the concept. Strengthening resilience includes not only physical measures, but also social networks and support systems, which provide significant support for population during crisis.
9. Cooperation and partnership – cooperation and partnership among sectors and stakeholders is indispensable for integration of gender equality and social inclusion in the concept. This principle highlights the significance of working with local communities, government agencies, civil society and international organizations for implementation of comprehensive and efficient climate change measures.

Gender equality and social inclusion stages in Georgia's Long-Term Low Emission Development Strategy

Detailed description of achievement of gender equality and social inclusion in Georgia's long-term low emission development and stages with timeline requires comprehensive approach. Cooperation with local and international experts, as well as communities with direct climate change impact is crucial for practical integration of achievements of the concept. The achievements include preparation of policy, development of opportunities and specific measures:

Creation of policy and legislative basis (2024 - 2027): Refers to creation, adoption and implementation of policy and legislative framework, which supports integration of gender equality and social inclusion in long-term and medium-term objectives and measures aimed to achieving climate neutrality.

Development of institutional capabilities (2024 - 2028): Development of capabilities of responsible institutions involved in implementation of the concept in order to integrate gender sensitive and inclusive approaches at institutional level. This includes training, seminars and establishment of specialized groups or units at state agencies.

Data collection, processing, and analysis (2024-2027): Introduction of methodologies for climate change impact disaggregated data collection, processing and analysis, including during planning-implementation of measures related to mitigation, adaptation and extreme weather.

Gender budgeting (2024 - 2028): Introduction of gender-responsive budgeting in finance mechanisms for implementation of the concept ensures consideration of investments for women, men and groups with various specific needs, more effective distribution and accessibility of resources.

Private sector involvement (2024 - 2030): Promotion of private sector companies to introduce gender sensitive and inclusive approaches in projects and corporate social responsibility initiatives related to climate change. This includes gender equality facilitation in employment in green economy, support to environment protection sector businesses owned by women and investments in technologies, which benefit women and groups with specific needs.

Strengthening capabilities and education (2024 - 2027): Strengthening educational, including vocational programs, which focus on development of capabilities related to climate change and environment protection. The programs should be based on gender sensitive and inclusive approaches, and they should consider various specific needs in climate change related measures, which would support to participation of all members of the society and leadership in environment protection initiatives.

Public awareness and involvement campaigns (2024 - 2027): Public awareness enhancement campaigns, which emphasize importance of gender equality and social inclusion with regard to climate change. The campaigns would ensure a change of public attitude and more inclusive participation in decision-making process during implementation of the concept.

Communication Plan



Communication plan, which defines key target audience, key messages and channels and methods for delivering these messages is necessary for successful implementation of Georgia's Long-Term Low Emission Development Concept.

The objective of the communication plan is to obtain trust and support of all stakeholders and wider society during the concept implementation process.

6 key target groups were identified in line with this objective:

- Public sector
- Private sector
- NGO sector, academia, research organizations
- International partners and donors
- Media
- General Public

Concrete messages were defined for communication with each group.

Table 2 - Target Audience and Messages

TARGET AUDIENCE	MESSAGE
Public Sector	Coordinated operation of public agencies and integration of the document's vision and objectives in sectoral policies and strategies is crucial
Private Sector	The transition to sustainable business models is accompanied by a variety of economic opportunities and potential for innovation that can be used by companies to expand their activities and grow
NGO sector, academia, research organizations	Expert knowledge, cooperation, and participation in preparation of policy measures is crucial for achieving goals of the concept.
International partners and donors	The concept is integral part of global efforts against climate change; hence, Georgia needs international support and financial assistance to implement the concept
Media	The concept is a key document of the country's long-term vision regarding climate change; hence, it is important that media follows its implementation and ensures provision of information to society
Wider society	Implementation of the concept provides social and economic benefit for each of us; significant participation during implementation of the concept is common responsibility for sustainable future

The following three communication channels would be used to achieve the objective of communication and deliver respective messages to selected audience: media visibility, digital communication, and face-to-face communication. Communication details, including information regarding specific activities for each communication channel, is available in Annex 1.

Monitoring and Evaluation



Scenarios and measures by sectors are provided in long-term low emission development strategy, which ensures achievement of climate neutrality by 2050. In addition, updated NDC document, together with National Climate Change Strategy and other related sector strategy documents will gradually further specify target indicators for climate neutrality and adaptation goals, respective measures, policies, and respective indicators for progress evaluation.

Supervision over implementation of the concept and coordination would be provided by **Climate Change (Governmental) Council**, which is a consultative entity established by the GOG and is responsible for coordination of climate policy and effective fulfilment of commitments under the PA and other international obligations. The Climate Change Council also reviews climate related projects to be submitted to various funds and financial institutions and issues recommendations to the Ministry of Environmental Protection and Agriculture for supporting the projects.

Monitoring of fulfilment of the Concept's goals and objectives is carried out using such instruments as follows:

Table 3 - Monitoring Instruments, Frequency and Responsible Institutions

N	MONITORING INSTRUMENT	RESPONSIBLE INSTITUTION	FREQUENCY
1	Biennial Transparency Report (BTR)	Ministry of Environmental Protection and Agriculture of Georgia	in every 2 years
2	Progress Report of National Adaptation	Ministry of Environmental Protection and Agriculture of Georgia	in every 2 years
3	National Communication under United Nations Framework Convention on Climate Change (UNFCCC)	Ministry of Environmental Protection and Agriculture of Georgia	in every 4 years
4	National GHG inventory report, could be prepared separately or could be part of BTR and national communication	Ministry of Environmental Protection and Agriculture of Georgia	in every 2 years
5	Progress report of National Climate Change Strategy's Action Plan	Ministry of Environmental Protection and Agriculture of Georgia	in every 2 years
6	Progress reports of implementation of sectoral strategies and action plans	Respective line Ministries	various frequency
7	Progress report of Energy and Climate National Integrated Plan	Ministry of Economy and Sustainable Development	in every 2 years
8	Municipal Sustainable Energy and Climate Strategies' progress reports	Municipalities	in every 2 years

Synchronization of these monitoring instruments and coordinated operation of respective institutions is important and ensures effective achievement of the concept goals.

Climate change new **Permanent Parliamentary Council**, which would be created on the bases of the law on climate change would monitor climate policy implementation progress. According to this law, the Permanent Parliamentary Council would establish consultative group of independent experts, which provides advice, analysis, information, and other support regarding climate change to the Permanent Parliamentary Council and Government.

Roadmap



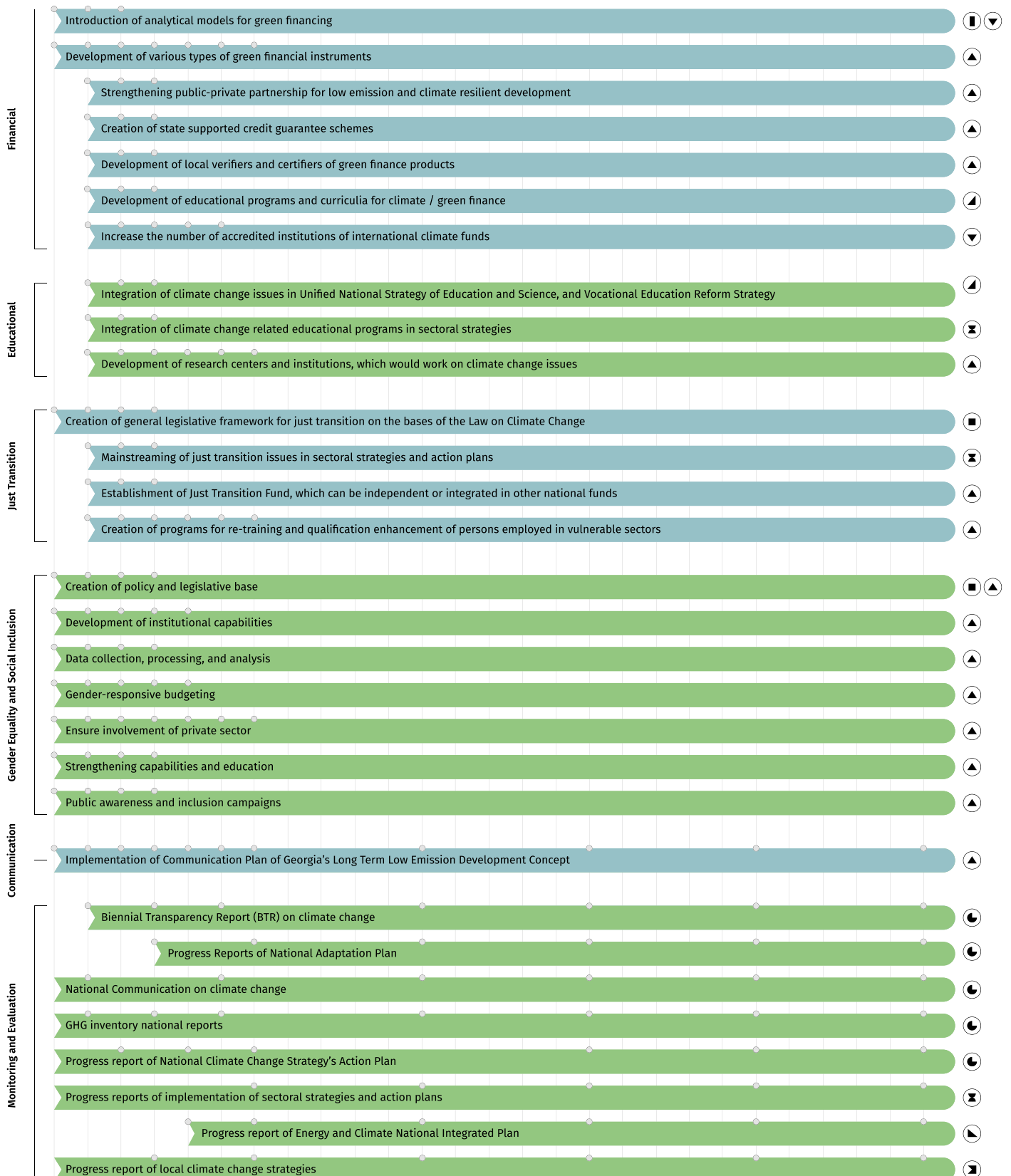
Roadmap

The goal of Georgia's long-term low emission development concept is to achieve climate neutrality by 2050 with strong climate change adaptation capabilities. The following roadmap was prepared to achieve this goal. Key milestones over the 2024-2050 period and responsible institutions are provided in the roadmap by topics

Responsible institutions:

- Commercial Banks
 - National Bank
 - Funds
 - Municipalities
 - Government of Georgia
 - Parliament of Georgia
 - Ministry of Finance
 - Ministry of Environmental Protection and Agriculture of Georgia
 - Ministry of Economy and Sustainable Development of Georgia
 - Ministry of Education, Science and Youth
 - Climate Change Council
 - Line Ministries
 - Stakeholders
 - Other Financial Intermediaries / Institutions
- Project Update by year





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3. International Labour Organisation (2020). *Assessment of the Social Protection System in Georgia*, . Available at: <https://www.developmentpathways.co.uk/wp-content/uploads/2021/02/ILO-Georgia.pdf>
4. National Statistics Office of Georgia <https://www.geostat.ge/ka/modules/categories/192/tskhovrebis-done>
5. International Labour Organization (2019). *Skills and jobs mismatch in low- and middle-income countries*, Available at https://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_726816.pdf
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7. Galt & Tagart (2020). *Georgia's Education Sector*, Available at: <https://api.galtandtaggart.com/sites/default/files/2021-05/25610.pdf>
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Annex 1.

Communication Plan



Well-planned and properly implemented communication is an important component for successful implementation of Georgia's Long-Term Low Emission Development Concept. This part provides description of strategic approach to communication and identification of key target groups, communication messages and channels so that information on achievements and goals of the concept is accessible and easily understandable for all stakeholders.

Communication Objective

Key objective of the communication strategy is for all stakeholders to correctly understand, and support vision provided in the concept. The following is required in order to achieve this:

- Enhance awareness regarding the concept
- Increase involvement of various stakeholders
- Coordinated work
- Obtain public trust through transparency of the process

6 target audiences were identified in line with the communication objectives (public sector, private sector, NGO sector, international partners and donors, media and wider society); messages tailored to each audience were prepared; and channels and methods required for dissemination of the messages were identified.

Table 5 - Communication Matrix

TARGET AUDIENCE	COMMUNICATION MESSAGE	CHANNEL
Public Sector	Coordinated operation of public bodies and integration of the document in various national policy	<ul style="list-style-type: none"> ● Participation under Climate Change Council ● Working meetings ● Political forums and conferences ● e-mail communication, newsletters and intranet (internal communication network)
Private Sector	Transition to sustainable business-models is accompanied by plethora of economic opportunities and potential for innovations, which can be used by businesses for their own aggrandizement	<ul style="list-style-type: none"> ● Webinars and seminars for various businesses ● Business forums ● TV and articles in digital media ● Webinars and seminars for various industries ● Social media campaigns ● Industry award campaigns
NGO Sector	Your expertise is crucial for achievement of the concept goals, so we propose cooperation	<ul style="list-style-type: none"> ● Consulting meetings and discussions ● Specific online communication platforms and applications (eg., Slack) ● e-mail communication and newsletters
International Partners and Donors	LT-LEDS is an integral part of global efforts against climate change, So, Georgia needs international assistance and financial support to implement the concept	<ul style="list-style-type: none"> ● International conferences and forums ● Direct communication with diplomatic missions, climate funds and multilateral donor organizations ● Official announcements ● Cooperation with international climate organizations ● Meetings with consistent frequency with existing donors and partners for informing them on the progress ● Summary reports
Wider Society	LT-LEDS is a key document of the country's long-term vision regarding climate change, hence, it is important that media follows its implementation and ensures provision of information to society	<ul style="list-style-type: none"> ● Educational programs ● Partnership with TV programs ● Visits to TV shows and news programs ● Social advertisement ● Articles in online media ● Facebook ● LinkedIn ● TikTok ● Any other social network, which would be relevant at a specific moment during long-term implementation of the concept

Review of the Target Audience

Public Sector – this group comprises all public agencies, which are in any form involved in implementation of the concept. Some of them might not yet see clearly connection of their activities with the concept, so, at the first stage of working with this audience our objective should be for them to understand their role in achieving the goals set by the document. Then they should be assured that compliance of their activities with the LT-LEDS is a strategic step towards sustainable development; and that Georgia would contribute to global fight against climate change by integrating the concept goals in their policies; also, cooperation is necessary in order to achieve our goals related to reduction of emissions and adaptation and to ensure green future for our nation.

Private Sector – this group consists of small, medium, and large businesses and the opportunity of economic benefits generated by implementation of the concept must be highlighted while communicating with them. Businesses should see that introduction of sustainable practice helps not only in reduction of emissions but also opens the door for innovations and efficiency. It is important to emphasize that the strategy creates an ecologically responsible and financially profitable business environment.

NGO Sector – this group comprises sectoral NGO organizations, civil society organizations and independent thematic experts. Advocacy and expert knowledge of this group is crucial for the success of the concept. It is necessary to express a favorable attitude and readiness for cooperation. It should be emphasized that only together can we turn the LT-LEDS's vision into a sustainable development model, which considers the needs of all groups of society.

International Partners and Donors – this group unites international partners of the country, international organizations, climate change related funds, other current or potential donors. It is important to demonstrate while communicating with them that Georgia is committed to achievement of climate neutrality by mid- century and it needs international support on this road.

Media – this group unites journalists from traditional and digital media in Tbilisi as well as in regions. Media plays a crucial role in forming public opinion, so active cooperation with media is necessary to obtain public support for the concept. The challenge is that journalists themselves might have difficulty in understanding environment protection and economic issues related to the concept, so, it is important to enhance awareness of media representatives in the first place, which would be followed by provision of information for wider society.

Wider Society – this comprises various groups of the population, all persons that will somehow experience impact because of the implementation of the concept. It is important for working with this group to explain what climate neutrality is and why it is important to achieve climate neutrality, what adaptation and adaptation measures mean, why it is important to ensure substantial resilience, what is the role of each citizen in these processes and what impact might planned changes have on each of us.

Communication Channels and Methods

The following three communication channels would be used to achieve communication objectives and deliver respective messages to selected audiences:

MEDIA VISIBILITY

**DIGITAL
COMMUNICATION**

**FACE-TO-FACE
COMMUNICATION**

Media visibility

Key target audience in the media visibility component should be wider society. In addition, we can talk to the private sector as well through this channel. Use of the following methods in this component would be beneficial:

- Social advertisement
- Partnership with TV program
- Visits to TV
- News broadcasting
- Articles in online media

Social Advertisement: It is possible to produce 30-second video clip series, which would explain the challenges currently facing us due to climate; what needs to be done at national level to mitigate these threats; what each citizen can do in this process; what LT-LEDS means and why it was necessary to prepare it; what changes to expect during implementation of the concept and how these changes would reflect on our daily lives. The video clips should be placed on TV stations' advertisement net as a social advertisement.

Partnership with TV program: It is possible to plan partnership with a TV program and prepare 8-10 min series in the form of online participation in the TV program twice a week on average. Timeline of discussion topics should be prepared in advance. For example: a) Education: demand on which professions would be generated by implementation of the concept; b) Social and gender issues; which gender-specific challenges and opportunities would be created by LT-LEDS; c) Success stories: examples of concrete businesses, how they managed transition to sustainable model; d) Innovative technologies: how innovative technologies help us in low emission development, etc. An expert of the topic can be invited for each broadcast to explain in nonprofessionals' language.

Digital communication

With regard to digital communication, our target audience includes all groups, which are identified in the chapter on target audiences. The following methods will be useful for this component:

- Social networks
- Partnership
- e-mail communication

Social networks: The following social networks could be used most actively: Facebook – as this is the most popular platform in Georgia and it is useful to work with wider society as well as specific target groups; TikTok – as this is the best network for access to younger audience and connection with youth should be one of our priorities due to long-term nature of the concept; LinkedIn – as this is an effective way to communicate with professional group.

Various format gender sensitive and inclusive informative material (cards, info-diagrams, animation video clips, stand-up videos) should be prepared in simple and understandable language for dissemination in social networks for **wider society**, including in the languages of ethnic minorities. The content of these materials should show the audience severity of the problems, which led to planning the big changes; for the audience to understand what changes are planned under the low emission development concept; what these changes mean for them; and in the long run, why are these changes beneficial personally for him/her, his/her family and the country. This informative material can be disseminated through social media pages of all public agencies, which are identified in the sub-chapter on stakeholders.

As for donors, NGO sector and media, we need to regularly disseminate informative summary, which describes the stage of the concept achieved at the moment, achievements to date and plans for future periods. The information should be targeted to and tailored for respective audiences.

Partnership: Apart from our social media platforms, it is important to use partnership as a communication instrument. It is necessary for the partnership to identify those pages on Facebook and TikTok channels, which have large audience and produce content, which is close to our objectives (for example, Climate Basics). They could produce video clips with participation of our speakers / experts or create content themselves explaining the audience what climate neutrality means, why it is important and how we, citizens, can support achievement of the goal.

e-mail communication: This method will be useful for communication with all target groups, excluding wider society. It is necessary to prepare the list of e-mail addresses of the target audience in advance (separately for each group) and prepare newsletter and so called Toolkits, which would be sent to them once in 2-3 months (frequency depends on the target audience and volume of the content to be communicated).

Face-to-face communication

This type of communication should be used for all groups defined under our target audiences. Direct communication method refers to physical events. The following methods can be used under this component:

- Workshops and webinars
- Roundtable discussions
- Periodic meetings
- Visits to educational institutions
- Awards
- Hackathons and datathons
- International days

Workshops: This method is most useful for communication with **media** representatives. This is the audience, which is the most crucial for information dissemination and reaching out largest audience – wider society, although most of the journalists do not have respective knowledge and experience for clarifying environment protection, energy and economy related issues. Hence, it is of utmost importance to plan a series of workshops for them to help them understand these issues. The objective of the workshops should be on one hand, to help us in establishing good relationship with media and on the other hand, to equip them with necessary skills and knowledge so that they could inform society regarding the concept.

Discussions: This format would be especially beneficial for communication with NGO and private sector target groups. Objective of the meetings for this format should be – in case of NGOs – provide information on current processes, as to a stakeholder and listen to their response. Constant communication with them and their support would be signal for international partners and donors that implementation of the concept is going in the right direction. In case of representatives of private sector, the meetings could serve discussing the needs facing us, which might become opportunities for the business (eg., import of new technologies).

Regular meetings: This method of communication could be used in relations with current and potential **donors**. Also, for talking with **public sector**. In the case of donors, the objective of the meetings would be on one hand, to inform them regarding the latest progress and on the other hand, to communicate our needs at present that necessitates their support. As for the other target group, private sector, regular meetings with them are necessary in order to ensure coordinated implementation of the concept. Such meetings might be held with small groups – several thematic directions combined, as well as extended meetings with the participation of representatives of all agencies, which are in some form involved in the process of achieving the concept goals.

Visits to educational institutions – Such visits can be conducted in schools, with senior students. Schools usually conduct career development orientation meetings and in this format, we can provide information to students and parents regarding what kind of labor would experience increased demand in future years. This would help us in promoting vocational training and training of cadres, which would be required by the country during implementation of the concept. Increased demand on these professions would push private sector to increase supply.

Award – Award, as communication instrument could be used in case of the following target audiences: **private sector, media** and **wider audience**. Industry awards could be introduced for private sector to promote corporate sustainability. The businesses with significant contribution to achievement of the concept goals would receive the awards. In case of media, annual award could be introduced for the best journalistic work, which serves enhancement of awareness regarding the concept. The following categories could be distinguished: the best TV topic, the best article in digital media, the best multimedia work, etc. As for wider audience, a competition could be announced for school students: for example, essays on climate neutrality. The objective of the competition would be promotion of the topic among audience.

Hackathons and datathons – Such types of competitions are distinguished by obtaining the most optimal solution to a problem with least resources. Organization of hackathons and datathons for wider audience (mostly for youth) to solve challenges of the concept would be very useful communication instrument as on one hand, persons interested in technologies would be gathered around the themes of our interest and on the other hand, it channels their ingenuity and technological knowledge towards our desirable goal and, innovative ideas might indeed be born, which would help us in achieving the concept goals in more efficient manner.

International days – There are several dates during a year, which around the world are dedicated to celebrating the topics, which are relevant to the concept; for example, earth's day, climate week, clean energy day, World environment day, etc. It is necessary to compile calendar of such relevant days and plan respective activities for each of them. Usually, various international or sectoral organizations plan various events on such days; it is possible to discuss partnership with them to further increase scale of their events. Such initiatives would attract media attention as well, which is a nice way of promoting the topic and enhancing awareness of **wider society**.

Communication Tone

Communication tone should be serious – in order to convey severity and urgency of the climate change issue and hence – importance of the concept; although, at the same time it should be simple – in order to make it easier to understand complex issues and **optimistic** – in order to demonstrate that there is a way out if we act together, which would promote involvement of citizens.

In summary, communication strategy is a kind of bridge between the concept goals and actual measures. Due to use of diverse communication methods and constant promotion of stakeholders, a feeling should arise that achievement of climate neutrality is a common goal for all of us and together we can achieve it.