KUTAISI
AIRPORT

Journey to the Greener future

Mapping the Journey: Kutaisi International Airport's Roadmap Net Zero by 2050

About United Airports of Georgia

United Airports of Georgia LLC is 100% state owned enterprise under the Ministry of Economy and Sustainable Development of Georgia. Established in 2010, the company owns all three international and three domestic airports in the country.

UAG is one of the leading airport management companies in Georgia, responsible for the operation and development of one international and three domestic airports in the country. With a commitment to excellence and sustainability, UAG plays a pivotal role in facilitating air travel, driving economic growth, and promoting connectivity within the region and beyond.

Kutaisi International Airport, the second largest in Georgia, along with domestic airports in Mestia, Ambrolauri, and Telavi, represent not just travel hubs, but pivotal drivers of tourism development in their respective regions. Under UAG's stewardship, these airports serve as catalysts for the tourism sectors in Mestia, Ambrolauri, and Telavi, elevating them as sought-after destinations on the global map.

While **Tbilisi and Batumi International Airports** are managed by "TAV Urban Georgia," the ownership of these aviation hubs remains firmly with United Airports of Georgia however, UAG ensures the highest standards of aviation security across all airports, safeguarding travelers and personnel alike.

Apart from the Airport operations and concession management United Airport of Georgia is responsible for promotion of all Georgian Airports on international level, managing negotiations with the airlines and incentivizing new routes to/from Georgia.

The rise in passenger numbers and flight operations speaks volumes about UAG's unparalleled success. In 2019, the three international airports collectively served 5,190,283 passengers and handled 23,953 flights. By 2023, these figures soared to 5,986,754 passengers and 25,607 flights, marking a remarkable 15% increase in passengers and a commendable 7% rise in flights, underscoring UAG's pivotal role in driving Georgia's aviation sector to new heights.

Commitment to Sustainability
UAG is committed to sustainability and environmental stewardship, aligning its operations with global efforts to mitigate climate change and reduce carbon emissions.
Through strategic initiatives and investments, UAG aims to minimize the environmental impact of airport operations while maximizing resource efficiency and promoting green technologies.

Infrastructure and Services
UAG continuously invests in modernizing and expanding airport infrastructure to meet growing passenger demands and enhance operational efficiency.
The company offers a wide range of passenger services, including terminal facilities, retail and dining options, ground transportation, and customer assistance, ensuring a seamless and enjoyable travel experience for all.

Partnerships and Collaboration
UAG values collaboration with airlines, government agencies, local communities, and other stakeholders to achieve common goals and address shared challenges.
By fostering partnerships, UAG strengthens its position as a key player in the aviation industry, driving innovation, and sustainable development.

United Airports of Georgia is a dynamic and forward-thinking airport management company dedicated to providing exceptional services, fostering economic growth, and promoting sustainability in Georgia's aviation sector. With a strong commitment to excellence and collaboration, UAG is willing to play a key role in shaping the future of air travel and connectivity in the region.

At Kutaisi International Airport and within the United Airports of Georgia family, we're dedicated to leading the charge towards a sustainable future. Our collective goal is to achieve net zero carbon emissions for our direct operations by 2030. While these efforts represent crucial initial steps, we acknowledge that our airports wield influence far beyond our immediate emissions.

That's why we pledge to collaborate with the broader aviation community in driving towards a shared objective: achieving net zero carbon emissions (Scopes 1 to 3) for our sector by 2050. By uniting our efforts and leveraging industry-wide cooperation, we aspire to pave the way for a greener, more sustainable aviation landscape, ensuring that our skies remain clear, and our planet thrives for generations to come.

Global and Political context of sustainable development

Global Context of Sustainable Development

The Paris Agreement, signed in 2015, sets the goal of limiting global warming to well below 2 degrees Celsius above pre-industrial levels, with efforts to limit it to 1.5 degrees Celsius. This agreement necessitates significant reductions in greenhouse gas emissions from all sectors, including aviation.
United Nations Sustainable Development Goals (SDGs) provide a framework for global development efforts until 2030. SDG 13 specifically addresses climate action, emphasizing the need to take urgent action to combat climate change and its impacts.

International Civil Aviation Organization (ICAO) plays a crucial role in setting international standards and policies for aviation emissions. Their Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) aims to stabilize CO2 emissions from international aviation at 2020 levels.
There is growing **public awareness and pressure** regarding climate change and the environmental impact of aviation. This has led to increased scrutiny of aviation emissions and calls for the industry to reduce its carbon footprint.

Political Context

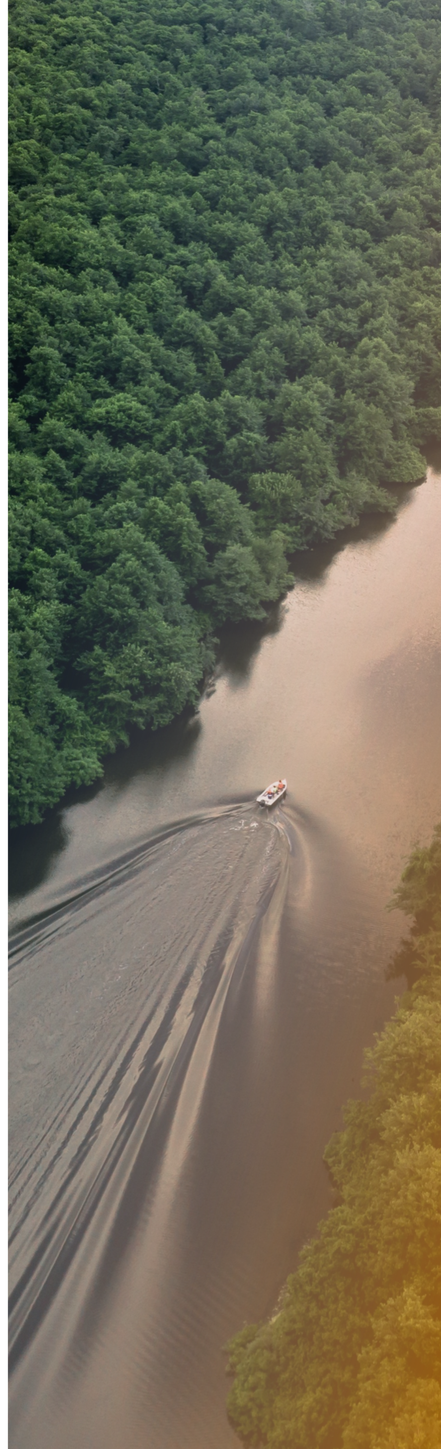
Many countries, including Georgia, have made commitments to reduce their greenhouse gas emissions under the Paris Agreement. This creates pressure for industries within these countries, including aviation, to contribute to national emission reduction targets.
Governments are implementing policies and regulations to encourage or mandate emission reductions in the aviation sector. This includes measures such as carbon pricing, incentives for alternative fuels, and emissions trading schemes.

Collaboration between governments, industry stakeholders, and international organizations is essential for developing and implementing effective strategies to reduce aviation emissions. This collaboration can facilitate the sharing of best practices, technology development, and investment in sustainable aviation solutions.

The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. They address the global challenges we face, including those related to poverty, inequality, climate change, environmental degradation, peace and justice. The 17 Goals are all interconnected, and in order to leave no one behind, it is important that we achieve them all by 2030. Click on any specific Goal below to learn more about each issue and take action.

The SDGs are based on the three pillars of sustainable development:
- Social progress
- Economic growth
- Environmental protection

UAG will create the strategy and identify the key priorities with alignment of the SDGs, as well as the ACI's Sustainable Strategy for Airports.



Georgia’s low emission development strategy & situation analysis

Transport Sector

Georgia’s climate-friendly economic development is directly linked to the efficient operation of the transport sector. Georgia is located at the crossroads of Europe and Asia and its economic growth largely depends on the effective use of its transit function. Since the 1990s, Georgia’s role in the transport corridor between Europe, the Caucasus and Asia has increased significantly. This reinforces the interest in the country’s sustainable development which primarily involves the creation of a quality transit infrastructure in the country.

Georgia’s transport system comprises five modes - road, rail, sea, air and pipelines. All provinces, cities, towns and neighboring countries are connected directly or indirectly by at least one of these modes. To improve these connections, rules and regulations on the supply of transport infrastructure and services have been revised since 2005, the institutions have been restructured and the authority for modernizing the transport system has been delegated to respective agencies. This has helped draw private capital into aviation (airports and airlines), maritime services (ports and shipping), road transport (all freight and intercity passenger) and pipelines (oil and gas from Azerbaijan and Kazakhstan).

GHG emissions from the transport sector and by transport modes are given in Table 1.6.1. For 1990- 2017, data are sourced from the National Inventory Report.16 For 2018-2019, GHG emissions are estimated by applying the Energy Balance of Georgia.17 According to the table below, the share of GHG emissions from road transport exceeds 90% of total GHG emissions from the transport sector and exceeds 99%, excluding pipelines.

Year	Total	Road transport						Civil aviation		Railways		National navigation		Pipelines	
		CO_2 და		CO_2		CH_4 და N_2O									
		Total	Share	CO_2	Share	CO_2 eq	Share	CO_2	Share	CO_2	Share	CO_2	Share	CO_2	Share
1990	3,901	3,678	94.3%	NE	-	43.58	1.12%	NE	-	101	2.59%	78	2.00%	NE	-
1995	863	844	97.8%	NE	-	0.89	0.10%	NE	-	NE	-	18	2.09%	NE	-
2000	965	945	97.9%	NE	-	0.04	0.00%	NE	-	NE	-	20	2.07%	NE	-
2005	1,571	1,537	97.8%	NE	-	0	0.00%	NE	-	NE	-	34	2.16%	NE	-
2010	2,630	2,390	90.9%	NE	-	0.02	0.00%	NE	-	190	7.22%	50	1.90%	NE	-
2015	4,208	3,965	94.2%	3,855	91.6%	110	2.60%	2	0.05%	18	0.43%	2	0.05%	221	5.3%
2016	4,500	4,239	94.2%	4,125	91.7%	114	2.54%	3	0.08%	34	0.75%	2	0.05%	222	4.9%
2017	4,472	4,240	94.8%	4,128	92.3%	112	2.50%	2	0.04%	34	0.77%	6	0.14%	190	4.3%
2018	4,153	3,875	93.3%	3,772	90.8%	103	2.48%	1	0.02%	34	0.83%	2	0.05%	240	5.8%
2019	3,995	3,669	91.8%	3,571	89.4%	97	2.44%	2	0.05%	32	0.80%	1	0.03%	292	7.3%

* GHG Emissions from the Transport Sector (in Gg CO2-eq) and Share of Transport Modes

Georgia intends to go "green" by 2050 by switching to energy-efficient technologies and renewables. Technological transformation and modernization are the keys to economic development and decarbonization through increasing efficiency, minimizing losses and utilizing low-emission technologies. Georgia plans to combine low-emission development and economic growth by introducing innovations that will reduce GHG emissions at the same time.

One of the main priorities of the Government of Georgia is the modernization and construction of transport infrastructure, meeting international standards and the harmonization of the national legislation with the international one. To achieve this, the government is implementing important infrastructure projects that will help to attract additional freight flows to Georgia and increase the efficiency of its transport system.

For this reason, Georgia proclaims ‘climate neutrality’ as its goal and aims at achieving it by mid-century.

UAG | Sustainable Development Goals

Impact	Material Issue	Sustainable Development Goals
Environment	Climate Change Water Biodiversity Material Resources Air Quality	
Economic	Economic Development & Employability Sustainable Supply Chain	
Social	Supporting the stakeholders Supporting the communities and people Environmental noise	

SUSTAINABLE DEVELOPMENT GOALS

Leveraging ACI Europe's Sustainability Strategy for Airports, Kutaisi International Airport has identified 10 critical sustainability points. These issues underpin our sustainability strategy, driving our commitment to responsible operations.
For each point, have delineated specific actions.

As part of our commitment to sustainability and environmental responsibility, Kutaisi International Airport, operated by the United Airports of Georgia, is dedicated to achieving net zero carbon emissions by 2050. Our long-term aspirational goals encompass a holistic approach to sustainable development, covering various aspects of airport operations and community engagement. These goals serve as a roadmap for our journey towards a greener, more environmentally-friendly future Kutaisi International Airport and the communities we serve.

UAG | Sustainable Development commitments

Climate Change | Environmental

PLAN

- **Baseline Assessment -** Conduct a comprehensive assessment of Kutaisi International Airport's current carbon footprint, including direct emissions from airport operations, as well as indirect emissions from electricity consumption, ground transportation, and other sources.
- **Airport Carbon Accreditation -** Kutaisi International Airport will implement Carbon Management Plan and achieve Airport Carbon Accreditation Level 3+
- **Transition to Renewable Energy -** powering airport operations with renewable energy sources; our primary objective is to power airport operations with renewable energy sources by **implementing solar panels** on parking deck roof for airport operations to obtain majority of the energy from the solar. By embracing clean energy technologies, we aim to gradually reduce carbon footprint and contribute to the fight against climate change.
- **Energy Efficiency Improvements -** Improving energy efficiency reduces energy consumption and supports sustainable industrialization and infrastructure development. By implementing infrastructure upgrades and optimization energy efficiency practices, such as transitioning runway lighting to100% LED by 2030, we can minimize energy consumption and reduce our environmental footprint.

- The implementation of the **de-icing utilization** system at Kutaisi International Airport is a critical component to our operational strategy. By 2025, our infrastructure will be fully equipped for de-icing fluids utilization.

- **Waste management -** Our goal is to minimize waste generation and maximize recycling and reuse efforts throughout the airport. By striving for zero waste to landfill, we aim to conserve resources, reduce pollution. We aim to install special equipment for compacting PET bottles and encourage airport tenants and concessionaires to minimize single-use plastics and adopt sustainable packaging practices We'll strengthen periodic meetings with tenants – food and retail, to promote waste reduction strategy and plastic strategy (packaging reduction, disposable plastic use reduction, etc.).

- **ISO 14001:2015 -** Our airport will implement an integrated management system (Managing Responsibly System) and will achieve ISO 14001:2015 accreditation.

- Support Georgian aviation sector achieve net zero 2050 carbon emissions by 2050.

SDG

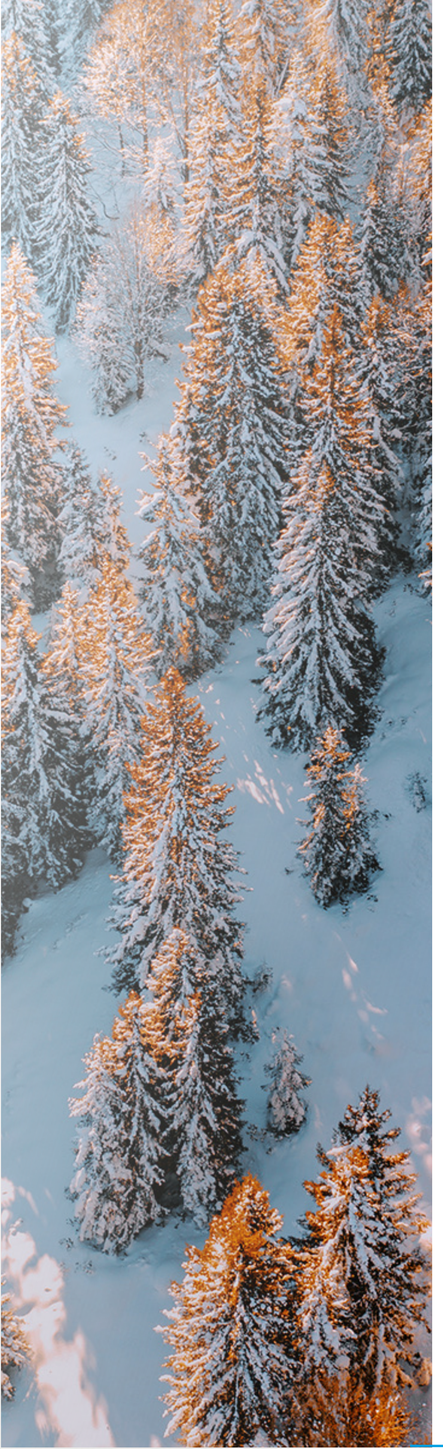
GHG protocol - Greenhouse gas emissions covers three scopes of emission, and they are categorized as:

SCOPE 1 – Direct emissions from company-owned or controlled sources, facilities and vehicles.

SCOPE 2 – Indirect emissions from the generation of purchased energy, electricity by the reporting company.

SCOPE 3 – All other indirect emissions that occur in the value chain.

The Airport Carbon Accreditation program is the only institutionally endorsed program that independently assesses and recognizes airports' efforts to manage and reduce their CO2 emissions. our airport will achieve Airport Carbon Accreditation Level 1 and 2 and will try to apply for Level 3+ by 2050.



UAG | Sustainable Development commitments

Air Quality | Environmental

PLAN

- **Electrification of Ground Vehicles -** Transitioning to electric or low-emission GSE (ground support equipment), that supports sustainable urban mobility. To further reduce emissions, we will gradually replace conventional fossil fuel-powered ground vehicles with electric or other low-emission alternatives. By electrifying our transportation fleet, we aim to minimize air pollution and promote sustainable mobility solutions. Majority of airside vehicles will be low-emission by 2030.
- Installation of **electric vehicle recharging stations by 2030** - encouraging smart and clean mobility to and from the airport by investing in electric recharging stations with clean energy availability and facilitating electric car sharing.
- Enhance the accessibility of the airport by implementing comprehensive **measures to promote the use of sustainable transportation options.** This includes incentivizing the utilization of eco-friendly modes such as buses and electric taxis, fostering a greener and more efficient transportation network for passengers.

- We will collaborate closely with our airline partners and stakeholders to implement robust strategies aimed at **minimizing air quality impacts during both the landing and take-off phases of flights**. By engaging in proactive measures and leveraging technological advancements, we aim to significantly reduce emissions and mitigate environmental impact throughout the entire aviation cycle.

- **Public Transportation -** Encourage the use of public transportation to and from the airport by providing convenient access to buses, trains, or other forms of mass transit. This can help reduce the number of emissions generated by passenger vehicles traveling to the airport.
- **Alternative Fuels** - Explore opportunities to incorporate sustainable aviation fuels (SAFs) into Kutaisi International Airport. This may involve partnerships with fuel suppliers, airlines, and government agencies to promote the production and use of SAFs.
- Kutaisi Airports owns and maintains diesel **generators** as the necessity for emergency backup generators – serving power units in the event of electricity supply interruptions from the provider. We are, actively exploring alternative power sources. Our aim is to minimize reliance on generators, thereby reducing power outages.

- As UAG undertakes the development of the **Kutaisi International Airport masterplan project,** our commitment extends to Incorporate sustainable building practices. This can include using environmentally friendly building materials, optimizing building orientation for natural light and ventilation. By designing and operating our facilities with sustainability in mind, we aim to minimize environmental impact and create healthy, energy-efficient spaces for passengers and all the stakeholders.

SDG

UAG | Sustainable Development commitments

Social & Economic commitments

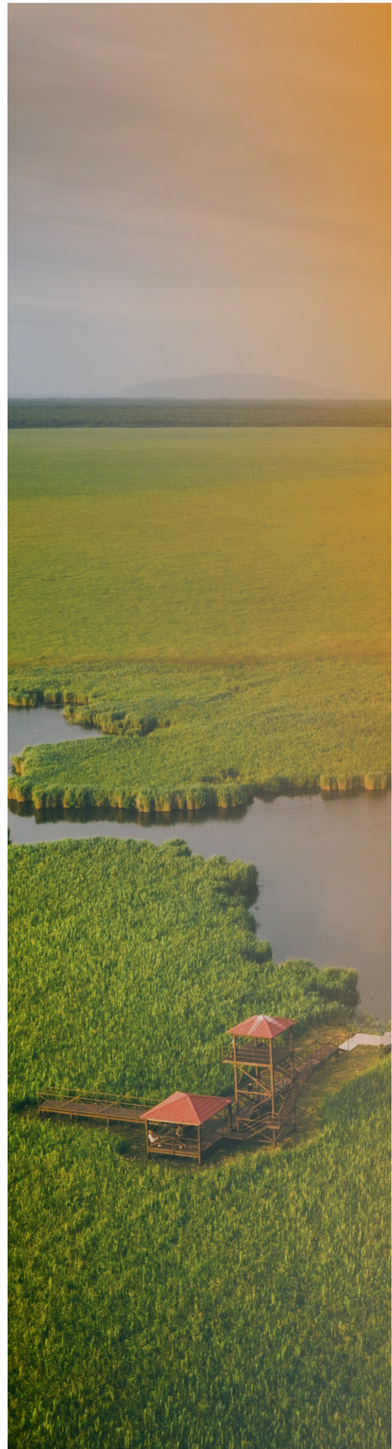
PLAN	SDG

- **Community Engagement and Education -** Engaging with communities and raising awareness about environmental issues promote quality education and strengthen partnerships for sustainable development, aligning with SDGs 4 and 17. We recognize the importance of engaging with local communities and raising awareness about environmental issues. Through educational programs, outreach initiatives, and partnerships with stakeholders, we will foster a culture of environmental stewardship and encourage sustainable behaviors both within the airport and in the surrounding area.
- Kutaisi International Airport is already engaged in **partnerships with local schools, colleges, and universities** to provide guidance, advice, and information on careers within the aviation industry. Moving forward, we are committed to enhancing these efforts, striving to deepen our collaborations and further develop opportunities for students interested in aviation careers.
- **Promoting a sustainable passenger journey -** Empower passengers with information and assistance to make eco-conscious choices; collaborate with partners to combat exploitation of both human and natural resources.

- **Collaboration and Engagement -** Engage with stakeholders, including airlines, tenants, local communities, and government agencies, to garner support for emission reduction initiatives and foster a culture of sustainability within the airport ecosystem.

- **Supply Chain Sustainability:** Promoting sustainability throughout the supply chain fosters responsible consumption and production patterns and encourages partnerships between stakeholders to achieve shared sustainability goals, in line with SDGs 12 and 17. By sourcing goods and services from environmentally responsible providers and encouraging them to adopt similar environmental goals, we aim to create a more sustainable aviation industry ecosystem.

- **Monitoring and Reporting -** Establish robust monitoring and reporting mechanisms to track progress towards emission reduction targets, identify areas for improvement, and ensure transparency and accountability in Kutaisi International Airport's sustainability efforts.



Roadmap to NET ZERO

Sustainable Water Management with Greywater Recycling

Kutaisi International Airport is taking steps towards sustainable water management by implementing a **greywater recycling** system. The implementation of a greywater recycling system at Kutaisi International Airport indicates a commitment to reducing water consumption and minimizing environmental impact. By recycling greywater, the airport can reduce its reliance on freshwater sources for non-potable purposes, thereby conserving precious resources and potentially lowering operational costs.

Kutaisi Airport's Green Rooftop - Enhancing Energy Efficiency and Biodiversity

Kutaisi Airport’s extended terminal has a **green rooftop,** which contributes energy efficiency, reducing the airport's heating and cooling needs which lead to lower energy consumption and decreased greenhouse gas emissions associated with heating, ventilation, and air conditioning systems. Also, in terms of biodiversity, green roofs provide habitat for birds, insects, and other wildlife, contributing to urban biodiversity.

Kutaisi Airport Promotes Sustainable Travel with Convenient Public Transportation Options

Kutaisi airport encourages the use of **public transportation options** to and from the airport. Passengers are provided with accessible and reliable transportation options, including buses, shuttles, and other modes of transit, which align with their flight arrivals and departures. Kutaisi International Airport sets an example for responsible travel practices.

Kutaisi Airport Leads Sustainability with Geothermal Heating and Cooling System

Kutaisi Airport’s use of a **Geothermal heating and cooling system** from 2012 is a significant step towards sustainability. Geothermal systems utilize the Earth's natural heat to regulate temperatures, reducing reliance on traditional heating and cooling methods that often rely on fossil fuels. Geothermal systems produce minimal greenhouse gas emissions since they don't burn fossil fuels for energy, thus helping combat climate change.

TBILISI KUTAISI MESTIA BATUMI AMBROLAURI TELAVI

Roadmap to NET ZERO

Kutaisi Airport Accelerates Towards Carbon Neutrality with Eco-Friendly Vehicle Fleet

Currently, a portion of our **airside fleet** is already equipped with these eco-friendly vehicles, additionally, we have recently procured EURO 6 airport shuttle buses, further enhancing our efforts to minimize emissions and improve air quality. Looking ahead, we have set ambitious targets to fully equip both landside and airside vehicles with low-emission or electric alternatives by the year 2050

Kutaisi Airport Unveils Ambitious Master Plan Focused on Sustainability

We are working on developing **Kutaisi International Airport Master Plan** and we are committed to integrating sustainable principles across all aspects of airport operations, including infrastructure development, energy usage, water management, waste reduction, and community engagement. This comprehensive approach reflects our dedication to minimizing our environmental footprint while maximizing the positive impact we can have on the surrounding ecosystem and community.

Waste Management Plan in Accordance with Georgia's Waste Management Code

We are currently in the process of developing a comprehensive waste management plan that aligns meticulously with the Waste Management Code outlined in the Law of Georgia.

TBILISI KUTAISI MESTIA BATUMI AMBROLAURI TELAVI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