Bakhvi HPP

CAUCASUS CLEAN ENERGY HOLDING (CCEH) HYDRO VI LLC

Sustainability and Emissions Reduction Plan

This Sustainability and Emissions Reduction Plan is approved by the Company Director: Giorgi Abramishvili

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CCEH HYDRO VI LLC
SUSTAINABILITY AND EMISSIONS REDUCTION PLAN

Definition

CCEH Hydro VI LLC (the "Company") is a company developing the Bakhvi 1 hydro power plant in Guria, region of Georgia. Bakhvi 1 HPP involves the construction and operation of a 10.9 MW run-of-the river hydroelectric power plant on the Bakhvistskali River, located within the Ozurgeti Municipality. Investors of the company include Caucasus Clean Energy Holding (CCEH), Austrian Investment Fund ILAG, and other field-specific investors from Austria and Georgia. CCEH's investors comprise well-known financial institutions from America and European countries (inclusing European Investment Bank [EIB], Dutch Development Bank [FMO], Austrian Development Bank [OeEB], etc.). ILAG holds diverse business interests across several Western countries.

Bakhvi 1 HPP is under construction on a section of the Bakhvistskali River spanning elevations between 1,735 meters and 1,383 meters above sea level. The headworks will be situated approximately 250 meters downstream from the confluence of the Bakhvistskali and Baisura Rivers. The flood intake structure will be located at an elevation of 1,731.70 meters, and the HPP building will be positioned at an elevation of 1,383.0 meters.

Bakhvi 1 HPP consists of a headworks structure, a pressure pipeline system, and an above-ground power plant building that will house the necessary mechanical and electrical equipment for electricity generation. The installed capacity of the power plant is 10.9 MW, with a design flow rate of 4.0 m^3/s.

CCEH Hydro VI LLC conducts its operations in compliance with the environmental and social management standards set by international financial institutions, including the IFC and EIB.s

Emissions refer to the release of greenhouse gases (such as carbon dioxide and methane) into the atmosphere, which trap heat and accelerate global warming by increasing the Earth's average temperature.

To emphasize Bakhvi 1 HPP's role as a renewable energy source that significantly contributes to emissions reduction in alignment with Georgia's Nationally Determined Contributions (NDCs), with defined operational and strategic emissions targets, it's important to note that Georgia's NDC is a commitment under the Paris Agreement. This document outlines the country's targets and actions to reduce greenhouse gas emissions and adapt to climate change, with updates and revised targets submitted every five years to ensure progress toward long-term environmental goals. This Plan reflects CCEH Hydro VI LLC's climate strategy during the construction phase of Bakhvi 1 HPP. Additional emissions targets and performance indicators will be introduced after commissioning to account for the operational footprint and energy generation profile of the plant.

Alignment with Georgia's NDC and Climate Goals

Georgia has set an ambitious goal to reduce its GHG emissions by 47% below 1990 levels by 2030, with an extended target of 50-57% reduction achievable through international support. Renewable energy sector in general and Bakhvi 1 HPP are essential to meeting these goals by generating low-carbon energy, thereby decreasing Georgia's reliance on fossil fuels and advancing the country's shift toward a cleaner, more sustainable energy landscape. Although still under construction, Bakhvi 1 HPP is expected to play a key role in Georgia's transition to clean and more sustainable energy system once operational.

As a hydropower facility, Bakhvi 1 HPP plays a its role in Georgia's renewable energy mix. Run-of-river hydropower plants, like Bakhvi 1 HPP, harness the natural flow of the river to generate electricity without the need for large reservoirs or burning fossil fuels. This approach produces no direct greenhouse gas emissions, making it a clean, environmentally friendly energy source that supports sustainable power generation with minimal impact on local ecosystems. This aligns with the country's commitment to clean energy, helping to lower the national carbon footprint in the energy sector. CCEH Hydro VI LLC also recognizes the importance of

long-term Net Zero strategies. While Bakhvi 1 HPP is not yet operational, the Company supports Georgia's decarbonization goals and intends to align its post-commissioning strategy with emerging Net Zero expectations for the energy sector.

Bakhvi 1 HPP will generate its own renewable energy upon commissioning; however, Scope 2 emissions will be reported to ensure full transparency regarding any minimal electricity consumption from external sources during the construction phase, for maintenance, or emergency backup systems. The company is committed to maintaining a near-zero Scope 2 emissions profile and continues to integrate energy-efficient solutions to minimize indirect emissions. By prioritizing transparency and aligning with international sustainability standards, Bakhvi 1 HPP reinforces its commitment to responsible and accurate emissions reporting.

Emission Management Methodology and Tracking Framework

The calculation of Scope 1 and Scope 2 emissions follows internationally recognized emission factors and operational data, ensuring compliance with industry best practices.

Scope 1 emissions represent direct emissions from fuel consumption in stationary combustion sources and fleet vehicles. These emissions are quantified using the formula:

Scope 1 Emissions (tCO_2eq/yr) = Total Fuel Consumed (tonnes) × Emission Factor ($tCO_2eq/tonne$), where an emission factor of 3.14 tCO_2eq per tonne of fuel is applied to reflect CO_2-equivalent emissions from different fuel types.

Scope 2 emissions, which arise from electricity consumption, are calculated using a grid-based approach:

Scope 2 Emissions (tCO_2eq/yr) = Total Electricity Consumed (kWh) × Grid Emission Factor ($kgCO_2eq/kWh$) × Loss Factor × Dual-Scoping Adjustment. The grid emission factor of 0.35 $kgCO_2eq/kWh$, combined with a loss factor of 0.2, accounts for transmission and distribution losses within the grid, ensuring a comprehensive assessment of indirect electricity-related emissions.

Scope 3 emissions, which encompass indirect emissions occurring across the value chain, are tracked and calculated to provide a holistic view of the organization's environmental impact. These emissions originate from activities such as business travel (air and land transport), site visits, guest and visitor trips, supply chain logistics, and operational support vehicles. The calculation applies the formula:

Scope 3 Emissions (tCO_2eq/yr) = Total Fuel Consumption (L) / 1000 × Emission Factor ($tCO_2eq/tonne$), with emission factors varying by fuel type. CCEH Hydro VI LLC maintains a structured tracking methodology to quantify and monitor Scope 3 emissions, ensuring accuracy and alignment with corporate sustainability goals.

Comprehensive tracking of Scope 1, Scope 2, and Scope 3 greenhouse has (GHG) emissions is fundamental to effective carbon accounting and the formulation of robust emission reduction strategies. While Scope 1, and Scope 2 emissions offer insight into direct and energy-related indirect emissions, Scope 3 encompasses a broader view of the company's overall environmental impact across its value chain. In 2025, in line with the increased scale and intensity of construction works, Scope 3 emissions tracking is being implemented, ensuring more comprehensive coverage of emissions associated with contractor activities, material transport, and the broader supply chain. By enhancing data accuracy and supporting the identification of targeted reduction measures, CCEH Hydro VI reaffirms its commitment to sustainability, regulatory compliance, and the achievement of long-term carbon management objectives.

Avoided emissions

At the current stage of development, the primary source of greenhouse gas (GHG) emissions for Bakhvi 1 HPP is associated with construction activities. While avoided emissions are not monitored during this phase, their future impact remains a key climate indicator.

In line with international good practice, CCEH Hydro VI LLC assessed potential avoided emissions during the pre-construction phase by estimating the expected reduction in GHG emissions resulting from the plant's renewable electricity generation once operational. By supplying clean hydropower to the grid, the plant will offset the need for fossil fuel-based electricity, thereby preventing emissions that would otherwise be generated from carbon-intensive sources.

Avoided emissions are calculated using the following formula:

Avoided Emissions (tCO_2eq) = Total Renewable Electricity Generated (MWh) × Grid Emission Factor (tCO_2eq/MWh). The grid emission factor reflects the average CO_2 emissions intensity of the regional electricity supply.

The grid emission factor represents the average carbon intensity of the regional electricity mix and serves as a baseline for quantifying the plant's emissions displacement potential.

By generating clean electricity, Bakhvi 1 HPP is expected to significantly reduce reliance on fossil fuels and contribute to Georgia's transition to a low-carbon energy system. This reflects the HPP's broader commitment to sustainability, climate action, and transparent emissions reporting.

Emission Reduction Targets

Scope 1 and Scope 2 greenhouse gas (GHG) emissions associated with Bakhvi 1 HPP are tracked to ensure coverage of all relevant emission sources. Emissions are monitored on a monthly basis and consolidated quarterly to support transparent and consistent reporting throughout the construction phase. From 2025, Scope 3 emissions are being tracked, reflecting the scale of construction activities and associated supply chain and contractor contributions.

Although avoided emissions are not monitored during construction, they remain a key climate impact indicator. In line with international good practice, CCEH Hydro VI LLC has conducted a pre-construction assessment to estimate the volume of avoided emissions expected during the operational phase. These represent the emissions that will be displaced by the plant's renewable electricity generation, which would otherwise be produced using fossil fuel-based sources.

Although avoided emissions are not tracked during construction, they remain a key climate impact indicator. In line with international best practice, CCEH Hydro VI LLC conducted a pre-construction assessment to estimate the volume of avoided emissions expected during the operational phase. These represent the emissions that will be displaced by the plant's renewable electricity generation, which would otherwise be produced using fossil fuel-based sources.

- Annual and Quarterly Targets:
  - CCEH Hydro VI LLC has established annual reduction targets for Scope 1, Scope 2, and Scope 3 emissions. These targets aim to support a continuous downward trend in overall HPP emissions and are aligned with the company's broader environmental and ESG commitments.

- 2030 Milestone:

Bakhvi 1 HPP is committed to aligning with Georgia's Nationally Determined Contribution (NDC). The HPP is targeting carbon neutrality following the commencement of operations and aims to contribute to the achievement of Georgia's 2030 NDC target, pursuing operational carbon neutrality where technically and economically feasible. While CCEH Hydro VI LLC does not commit to a formal Net Zero pathway at this stage of the HPP, the Company acknowledges that operational carbon neutrality is a long-term aspiration**.** This Plan provides a foundation for emissions transparency, tracking, and future alignment with Net Zero strategies post-commissioning.

Scope 1 and Scope 2 emissions are tracked and reported for Bakhvi 1 HPP to ensure coverage of all relevant emission sources. From 2025, Scope 3 emissions monitoring is being implemented to ensure comprehensive coverage of all relevant emission sources throughout the construction phase.

Emissions Metrics and Target Types

Bakhvi 1 HPP uses the following metrics and targets to track and disclose emissions:

1. Absolute Emissions Target: Target an overall reduction across all scopes, with quarterly tracking of Scope 1 and Scope 2 emissions and annual tracking of Scope 3 emissions starting from 2025
2. Measures emissions per unit of projected power output (e.g., CO_2e per MWh), supporting future operational efficiency and aiming to minimize emissions relative to energy generation once the plant is operational
3. Increase renewable sources within operations, monitored quarterly, to lower emissions and align with Georgia's renewable energy goals;
4. Disclose annual emissions data, including Scope 1, Scope 2, and Scope 3 emissions, reflecting the company's commitment to comprehensive emissions accounting across all relevant sources

Emissions Data For 2024

Type Of Data	Q1	Q2	Q3	Q4	Actual '24
Scope 1 (tCo2eq/yr)	133	15	19	14	181
Scope 2 (tCo2eq/yr)	0,16	0	0,25	0,11	0,52
Scope 3 (tCo2eq/yr)	N/A	N/A	N/A	N/A	N/A
AVOIDED EMISSION (tCo2eq/yr)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

Emissions Data For 2025[1]

Type Of Data	Q1	Q2	Q3	Q4	Actual '25
Scope 1 (tCo2eq/yr)	14	15	28	23	80
Scope 2 (tCo2eq/yr)	0,04	0.08	0,03	0,02	0,17
Scope 3 (tCo2eq/yr)	14	126	45	28	213
AVOIDED EMISSION (tCo2eq/yr)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**

GHG Emissions Outlook

CCEH Hydro VI LLC is committed to supporting Georgia's national climate goals through a proactive emissions reduction strategy. As Bakhvi 1 HPP remains in its construction phase, CCEH Hydro VI LLC will designate the first

[1] Emissions data for 2024 correspond to the construction phase of the HPP

full year of operation as the baseline year once the HPP becomes operational, at which point GHG emissions projections will be updated and a target will be set to reduce total emissions by 30% by 2030 relative to this baseline.

To achieve this, CCEH Hydro VI LLC will implement a structured, year-over-year reduction pathway, focused on cleaner technologies, improved energy efficiency, and alignment with international sustainability practices.

While a formal Net Zero roadmap is not yet in place, CCEH Hydro VI LLC acknowledges the need to align its long-term climate approach with emerging decarbonization expectations.

The company upholds its commitment to responsible business conduct and integrates environmental stewardship into its core operational principles. This approach reflects CCEH Hydro VI LLC's broader vision for low-carbon development and long-term sustainability.

Implementation and Monitoring

1. We commit to tracking emissions quarterly, as carried out during the construction phase of Bakhvi 1 HPP, and continuing the same approach throughout the operational phase to ensure alignment with reduction targets and transparency in reporting
2. We commit for regular internal and external audits to validate data accuracy and ensure compliance with emissions targets
3. We commit to conducting regular internal and external audits to validate data accuracy and ensure compliance with emissions targets, continuing the approach established during the construction phase into the operational phase
4. We commit to disclosing annual progress on the company's website through ESG reports, continuing the practice implemented during the construction phase by reporting detailed emissions metrics and achievements during the operational period.

Roles and Responsibilities for Implementation

1. Company Director: Provides strategic oversight and supports the ESG and Technical teams to ensure the effective implementation of the Sustainability and Emissions Reduction Plan. Validates emissions data and ensures alignment with corporate sustainability commitments.
2. ESG Manager: Oversees emissions tracking, data verification, and reporting to ensure compliance with sustainability targets and regulatory requirements. Works with the Technical Team to integrate emissions reduction initiatives into company operations.
3. Technical Team: Leads the implementation of emissions reduction initiatives, including energy efficiency improvements, equipment upgrades, and operational adjustments. Obligated to coordinate all activities with the ESG Manager to ensure alignment with CCEH Hydro VI LLC's Environmental Requirements and sustainability commitments. Responsible for ensuring compliance with supply chain sustainability requirements and tracking emissions associated with procurement activities.
4. The Caucasus Clean Energy Holding: Conducts independent review to validate emissions data, assess sustainability performance, and ensure continuous improvement in emissions reduction strategies

Methodology for Target Setting and Evaluation

Data Collection:

During the start of the construction phase, Bakhvi 1 HPP collects quarterly data for Scope 1 and Scope 2 emissions. From 2025, Scope 3 emissions are integrated into the tracking and reporting process to ensure more comprehensive GHG accounting. These efforts establish a resilient baseline and support early alignment with future reduction targets. The same methodology will be applied and further expanded during the operational phase once the plant is commissioned and enters into service.

- Tracking Methodology: emissions data during construction is collected using fuel consumption logs, supplier-provided fuel usage records, and site energy consumption records for the operational phase, emissions tracking will incorporate automated energy monitoring system for continuous and precise data collection. The methodology will be reviewed and updated accordingly once the plant is commissioned, taking into account operational realities, data availability, and technical capacity.
- Verification Process: Emissions data collected by the company team undergoes internal review to ensure consistency and transparency. Third-party verification has not been conducted to date but is anticipated as part of future assurance processes to strengthen the reliability and credibility of the reported data
- Technology Used:
    - Electricity Consumption: During the construction phase, electricity use is monitored through on-site metering systems. In the operational phase, automated metering systems will be implemented to ensure real-time and accurate measurement
    - Fuel Usage: Data is collected from fuel provider records and verified by the accounting department, ensuring accuracy in reported fuel consumption.
    - Emission Factors: Applied based on sector-specific international practices, ensuring alignment with recognized global standards for emissions calculations.

Benchmarking:

CCEH Hydro VI LLC benchmarks its emissions data against:

- National Climate Goals (Georgia's NDC) to align with GHG reduction commitments.
- Industry Standards, including emissions intensity benchmarks for hydropower facilities.
- Best Practices in ESG Reporting, such as Task Force on Climate-Related Financial Disclosures (TCFD) and GHG Protocol methodologies.

Sustaining Low-Emission Operations:

- Suppliers undergo a pre-contract evaluation to ensure their environmental management practices align with CCEH Hydro VI LLC's sustainability standards and support the low-carbon footprint of hydropower operations.
- During the construction phase, CCEH Hydro VI LLC has prioritized energy efficiency by implementing measures such as scheduled equipment maintenance, optimized machinery use, and monitoring of temporary power systems to reduce unnecessary energy consumption. For the operational phase, the company will apply similar principles by conducting regular turbine performance assessments, making operational adjustments to maximize energy output, and ensuring preventive maintenance to limit downtime. In both phases, reliance on grid electricity is minimized by emphasizing on-site renewable generation and using backup power inly when operationally essential

Sustainability and Emissions Reduction Plan Annual Revision Process

Aligned with internationally recognized ESG practices and standards, our Company undertakes a comprehensive review of the Sustainability and Emissions Reduction Plan at the end of each year. This systematic review, led by the Company ESG Manager, ensures that our disclosures accurately reflect current assessments, performance metrics, and operational practices. If any modifications are made during the revision process, the updated documentation is subjected to a thorough approval procedure. Initially, the proposed changes are carefully reviewed and endorsed by the Company Director. Following this, the revised document is shared with the Caucasus Clean Energy Holding ESG and Sustainability Lead for final validation, ensuring that each modification adheres to our commitment to quality, transparency, and regulatory compliance. The Supervisory Board members are informed regarding changes, reinforcing our commitment to maintaining high international ESG standards.

The updated version of Sustainability and Emissions Reduction Plan is uploaded onto the company's webpage, while the previous version remains accessible on the website in the archive folder.