
Project Title: Enabling the Implementation of Georgia's Forest Sector Reform (ECO.Georgia)

Project/Activity Number: 20.2275.4-001.00 / 0201

Title of the assignment: Alternative fuel market monitoring

1. Brief information on the project

Climate change impacts and the demand for fuelwood from the rural population put significant pressure on Georgia's forests: up to 90% of rural households (1.43 million people) rely on fuelwood for their energy needs. The problem is exacerbated by households using obsolete technologies, such as traditional stoves, with a lifetime of two years and an efficiency of 35% or less. Fuelwood demand exceeds sustainable harvesting levels, considering the country's reduced productivity of many forests because of extensive forest degradation. This forest degradation leads to a loss of carbon absorption capacity, which is projected to decrease by five times between 1990 and 2030.

To address this negative development, the project "Enabling the Implementation of Georgia's Forest Sector Reform - ECO.Georgia" supports the Government of Georgia's transformational forest sector reform agenda to put the entire nation's forests under the framework for sustainable forest management (SFM). It will do so by supporting the establishment of a nationwide SFM system (Component 1) and, in parallel, promoting market development for energy-efficient appliances and alternative fuels (Component 2) to address the primary driver of forest degradation. In addition, the project will safeguard the reform implementation by diversifying livelihood opportunities and strengthening local self-governance in forest adjoining rural communities (Component 3).

The project is funded by the Green Climate Fund (GCF), the German Federal Ministry for Economic Cooperation and Development (BMZ), and the Swiss Development Cooperation (SDC), with GIZ being the project's accredited entity. The German contribution is part of the more comprehensive German support in the priority area "Environmental policy, conservation and sustainable use of natural resources in the South Caucasus", which aims at the sustainable use of natural resources, biodiversity conservation and climate protection, particularly for the benefit of the rural population. Similarly, both the share of renewables in the energy composition and the energy efficiency levels will increase.

Especially rural households using firewood as their source of heating energy will benefit from improved air quality and reduced fuelwood demand through eased access to energy efficient stoves. Forest-related small and medium-sized enterprises and their employees will receive support to improve their business activities' economic efficiency and environmental sustainability. Additionally, staff members of relevant public institutions (National Forestry Agency (NFA), Department of Environmental Supervision (DES), Environmental Information and Education Centre (EIEC), Rural Development Agency (RDA), municipalities) will receive direct support through human capacity development measures and grant finance.

ECO.Georgia primarily contributes to achieving the sustainable development goal (SDG) 15 (Protect, restore and promote sustainable use of terrestrial ecosystems) of the 2030 Agenda of the UN, but also to achieving SDG 7 (Ensure access to affordable, reliable, sustainable and modern energy for all), SDG 13 (Take urgent action to combat climate change and its impacts), SDG 1 (End poverty in all its forms everywhere), and SDG 5 (Achieve gender equality and empower all women and girls).

The duration of ECO.Georgia is from 2021 until March 2029.

2. Description of the Assignment

2.1. Context

The current fuelwood consumption exceeds the sustainable supply level several times. Over 80% of rural households currently use wood for energy purposes. It is, therefore, not only necessary to reduce fuelwood demand by consuming less, by heating less or using more efficient woodburning stoves, but also to explore alternatives. Based on data from previous studies, Georgia possesses significant volumes of solid woody biomass residue that is not currently utilized and can be used for heating through the production of Upgraded Solid Biofuels (USB). USB production would considerably satisfy heating needs in the regions and reduce demand for fuelwood. Alternative fuels (AF), such as USB, can be produced from woody or agricultural residues and industrial and municipal sources by modern processes and technologies. AF production would diversify domestic heating fuel supplies, easing pressure on forestry resources and supporting the rural economy. Nevertheless, due to different challenges, AF production is not widely developed in the country.

A local market exists for the simplest forms of USB, wood chips and hazelnut shells in Georgia. In 2023, in the context of the ECO.Georgia project, an assessment of the AF market in Georgia was conducted. This included a technical and economic feasibility assessment of the AF market's sustainable functioning, including the AF production and its real potential for selling. It also assessed the feasibility of the project's objective to achieve an AF market volume of 28,600 tons of yearly. The findings were, amongst others, that there are currently nine local briquette producer companies with an annual briquette production of 3,298 tons. However, according to the producers the annual production capacity of briquettes is up to 30,200 tons. This could contribute to the targeted AF market volume of the ECO.Georgia project. Most briquette producers named supply of production materials and its prices as a major challenge for their development. The prices per ton of briquettes on the market vary between GEL 1,200 and GEL 1,500, which is quite expensive for households. As a result, there is little motivation for producers to create briquettes for local households. The most active briquette producers in the country tend to only manufacture when there is a specific order or public procurement. The study has revealed that in the current situation, AF cannot compete with cheap firewood (around GEL 90 per cubic meter). Estimates show that using briquettes for heating is around 5 times more expensive than using firewood over the heating season. Continued export of hazelnut shell can increase material prices and make AF less competitive. In addition, import of briquettes is increasing and competing the local production; primarily from Belarus, that represents the 66% of all foreign supplies of AF. However, it can also be observed that the market is highly dynamic, and that market volume and prices are under constant development.

To address these challenges, the project has developed a roadmap for the development of the AF market, including policy and producer initiatives. As a next step, the AF market needs to be continuously monitored for the project to be able to identify market trends and dynamics and, when necessary, adjust project activities accordingly.

2.2. Objective(s) of the assignment and work packages/tasks

The objective of the assignment is to monitor the alternative fuel market development in Georgia and provide information about producers, production volumes and sales channels. In this context, alternative fuels are defined as briquettes and pellets.

The consultant shall provide two reports per year containing the at minimum the following up-to-date information on the supply- and demand-side of the AF market.

In the interim report, covering the period from January-June the following data shall be included:

1) Monitoring of production data

The report shall contain a database of producers (current ones, new ones entering the market, producers having ceased operations), the types of briquettes or pellets they produce (RUF, Pini Kay or others), raw materials used, source of raw materials production volume and, if available production cost.

2) Monitoring of sales data

To monitor the sales volumes in the market, the report shall contain information on how many tons of AF were sold by the producers, through which channels (public tenders, retail stores, etc.) to which target group (public sector vs. industry vs. households) and what the price per unit was. In some cases, information may be given in a unit different from tons (e.g. package of AF), in those cases, the consultant shall convert that unit to tons and provide both numbers.

In the full-year report, covering the data from January-December, the monitoring data mentioned under 1) and 2) shall be included, and in addition:

3) Monitoring of import and export flows

In addition to monitoring local production and sales, the report shall contain information about the amounts of AF being imported and exported in the given period. It shall address the quantity in tons, price, and provenance/destination countries. It shall also specify who is importing and exporting to see if e.g. the local producers are substituting their own production to achieve tender volumes, or if there are other market players involved.

4) View on policy developments and producer's challenges

In addition to the quantitative data mentioned under 1)-3), the consultants shall provide a view on policy developments in the AF sector, if any were observed in the year under assessment. In relation to the policy developments and general market climate, the consultants shall conduct at least 3 in-depth interviews with local producers per year to get an impression on their achievements and most pressing challenges, and to derive recommendations for the further development of the AF market in Georgia.

The necessary data to produce these reports shall be obtained through regular producer interviews, monitoring of public procurement and Geostat figures, interviews with retail stores, and other relevant sources. Contact with AF producers in the RDA funding schemes will be provided by the project. Also, the 2023 market assessment mentioned in the context section will be made available to the consultant.

2.3. Deliverables

Expected outputs are described in the table below:

Deliverables	Deadline	Number of days per expert in total
Deliverable 1 A standardized table of content for the report is agreed for the interim and the full-year reports with ECO.Georgia.	Within 1 month after the contract is signed	Up to 5 expert days
Deliverables 2 (2025), (2026), (2027) An interim report is submitted to ECO.Georgia for the data collection period from January – June containing data on production and sales data.	The deadline for each report is July 31 of that same year.	Up to 40 expert days (10 per report)
Deliverables 3 (2024), (2025), (2026), and (2027) A full-year report is submitted to ECO.Georgia for the data collection period from January – December containing data all data mentioned above.	The deadline for each report is January 31 of the following year. Report for 2024 should be delivered until 30.11.24.	Up to 60 expert days (15 per report)
Travel expenses		Number of days/nights per expert
None		

3. Concept

In the tender, the tenderer is required to submit a technical proposal showing how the objectives defined in Chapter 2 are to be achieved and if applicable under consideration of further method-related requirements (technical-methodological concept).

The technical proposal will be evaluated in accordance with the assessment grid which consists of followings:

(2.1) Concept

- a. interpretation of the objective /assignment (2.1)
- b. strategy for the implementation reflecting other alternatives (2.1)
- c. implementation methods (structured by project) (2.1)
- d. work plan in a visual form (2.1)

4. Experts' profile

Personnel concept

The tenderer is required to provide personnel who are suited to filling the positions described, on the basis of their CV, the range of tasks involved and the required qualifications.

The CV of the personnel proposed meeting the requirements below must be submitted using the format specified in the terms and conditions for application. The CV shall not exceed 4 pages each. They must clearly show the position and job the proposed person held in the reference project and for how long.

Expert 1: Economist and/or data analyst experienced in conducting surveys or market research.

(5.1.1) General qualification:

- **Education:** University Degree; master's or higher degree in economics, data science, sociology, environmental issues, or a related subject
- **General Professional experience:** 5 years of experience in surveying, data analysis or data processing

(5.1.2) Specific qualification:

- **Specific professional experience:** 2 years of experience conducting surveys and market research in the field of energy efficient technologies/solutions or alternative fuels produced from biomass.

(5.1.3) Regional experience / knowledge of country:

- **Experience in the region/knowledge of the country:** Knowledge in biomass and EE/AF field in Georgia

(5.1.4) Linguistic skills (state language):

- **Business fluency** in English
- Georgian Fluent.

5. Timing and duration

From June 2024 to March 2028

6. Place of assignment

Georgia

7. Reporting

- Reports are to be prepared according to the GIZ template to be provided by the project.
- All documents shall be delivered electronically in English.
- The consultant shall report to and closely coordinate with ECO.Georgia.

8. Other provisions

8.1 Budgeting and payment

Payments can be made after submission and acceptance of interim / full year report of respective year.

8.2 Requirements on the format of the financial bid

Please calculate your price bid in line with the costing requirements.

The specifications for pricing are defined in the attached price schedule which is required to be used for the preparation of the financial offer. The sheet named "Individual Expert" should be used if a bid is being submitted by an individual. The sheet named "Company" should be used if a bid is being submitted by a company.

9. Data Protection

In the context of preparing the database for AF product producers, conducting surveys with the producers and related tasks personal data will be processed on behalf of GIZ. Therefore, an agreement on "Outsourcing of data processing (AuV)" will be concluded with the contractor in accordance with Art. 28 GDPR. For this purpose, the technical and organisational measures (TOM) for compliance with the data protection requirements must be outlined prior to conclusion of the contract. If the contractor has already been audited by GIZ in the past, an update in accordance with GDPR must nevertheless be sent. After a positive check, the contract is concluded with the AuV attachment.

The contractor will be granted access to the AF producers' personal data (**name, contact and communication data: telephone and email**), in the ECO.Georgia Project database. The personal data must only be used to carry out activities determined by the ToR, particularly for conducting AF market monitoring and corresponding surveys.

The contractor shall only collect personal data from AF producers that are strictly necessary and relevant to the task, such as their name, surname, ID, telephone number, and factory address, following the principle of data minimization.

Annex

- Annex on Outsourcing of Data Processing (AuV)