



IN PARTNERSHIP WITH



COUNTRY CASE STUDY

COUNTRY	POPULATION	MITIGATION GOALS	NATIONAL EMISSIONS IN 2020
GEORGIA	3,714,000	-15% BY 2030 (BASELINE: 2021)	11.74 MTCO ₂ E (12.02 IN 2019; 11.33 IN 2018)

Georgia • Gender-sensitive energy cooperatives in Georgian rural areas

82% of the energy used by Georgia's rural population (i.e., 41% of the national population) stems from unsustainably harvested firewood which causes emissions, deforestation and indoor air pollution. Georgia also has a precarious energy situation because of the lack of sufficient infrastructure, significant fuel costs, and [extreme weather conditions](#). In 2016, the NGO Women Engage for a Common Future (WECF), created four gender-sensitive energy cooperatives, in partnership with Clean Power Europe and other Georgian NGOs. These cooperatives are driven by goals of both climate change mitigation and the empowerment of rural women.

Giving access to clean and affordable energy for all

The role of the cooperatives is to set up, manufacture, and promote the use of locally produced energy-efficient equipment. The project relies on two pillars to directly reduce carbon emissions: replacing firewood with solar energy and promoting efficient stoves to conserve wood fuel. 1,000 solar water heating systems and 300 energy-efficient stoves are currently in use – versus [650 and 100](#) respectively at the beginning – leading to an emissions reduction of [1 to 2.55](#) tCO₂ and the saving of around 3 m³ of wood per year for each household.

Deforestation caused by using firewood is a major issue for the sustainable management of Georgia's forests, which cover almost half of the country. Despite its abundance, firewood ([30%](#) of the energy mix) is overexploited with 600,000 m³ of trees being legally cut down per year and 1,800,000 illegally logged, whereas the forests are able to sustain [200,000 m³](#). Georgia's 2030 Climate Change [Strategy](#) (June 2021) mentioned the goal of reducing firewood consumption by 245,000 m³ which could save 1,000 ha of forest per year. [Objective 3.4](#) of the Strategy supports the use of solar water heating systems and energy-efficient stoves to reduce both poverty and carbon emissions.

WECF, and the German company Solar Partner Süd, have been collaborating on an ambitious programme since 2009, which trains rural populations on the ma-

nufacturing of solar equipment and how to create and manage energy cooperatives. 183 "solar ambassadors" were also trained to promote the equipment in the region, making a revenue based on their sales. Since 2015, WECF has focused on training women since they usually lack access to technical, management and decision-making jobs. At the national level, Heliotech is the umbrella cooperative coordinating centralised activities such as purchasing, marketing and finances. In remote rural areas, this model of [energy communities](#), based on citizen's participation, provide access to clean, sustainable and affordable energy. Start-up costs of energy communities are usually paid off in three to six years.

A local and replicable project in quest of a sustainable economic model

The four cooperatives to date are owned by 128 constituting members, who have bought shares for a price between €30 to €60 each. Democratic governance is ensured by the rule that each member has one vote, regardless of their number of shares. Each cooperative has created between one and six local jobs. 40% of the 31 employees are women, since gender equality is a core element of the cooperatives.

Nonetheless, even though four cooperatives were launched thanks to [grants](#)

fundraised by WECF, the main obstacle in the future is access to finance. In view of the low purchasing capacity of the population, subsidies and loans are needed. Three cooperatives had to temporarily stop their activities due to the pandemic and the armed conflict in Ukraine.

While Heliotech had negotiated one-year loans at 0% interest for people interested in buying the equipment, the customers were unable to reimburse them in one year. Furthermore, the country has been marked for many decades by a Soviet-style planning policy, which makes it difficult to establish a market approach and trust in financial institutions.

The project was integrated in Georgia's [NDC](#) and three Nationally Appropriate Mitigation Action ([NAMA](#)) applications have been made since 2015 in cooperation with the government, in order to obtain the necessary subsidies, but they have been rejected despite having a high rating. The Covid-19 crisis put a strain on the internal resources generated by the cooperatives. Guesthouses constitute a part of the energy demand and were therefore affected by the decline in tourism during the pandemic. The project is now working to obtain carbon credit, using the Gold Standard's methodology, to cover subsidies and private investors setting up a market of scale.