

BQS improved cookstoves for Burundi schools

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- **Project developers:**
Burundi Quality Stoves S.A.
Aera Group.
- **Project partner organizations:**
Ministry of Education,
World Food Program.
- **Operational start date and projected lifetime of the project:**
Project start date: January 25, 2016.
Project crediting period: 7 years.

- **Type of Project:**
Fuel Switch, Renewable Biomass Cookstoves.
- **Carbon credit standard:**
VCS – Verified Carbon Standard.
- **Market sector of Carbon Credits:**
Voluntary.
- **Approximate annual emission reductions (tCO2e):**
90,000 net GHG emission reductions per year.

- **Location:**
All schools communities' locations, starting by Bujumbura, Burundi.



A total of 263,695 net GHG emission reductions have been achieved.

Official Project Design Document link: <https://registry.verra.org/app/projectDetail/VCS/2616>

The project entails the local manufacturing of enhanced cookstoves and provision of briquettes made from renewable biomass to canteens in Burundi's schools. This initiative aims to transition from reliance on non-renewable logged trees to a sustainable energy source.

Currently, in most Burundian schools, kitchens consist essentially of using an open fire system (3-stone) and traditional stoves. These stoves are notoriously wasteful, with an efficiency level of only 10-15%, and they produce harmful smoke. The project's improved fixed stoves, mostly installed in batches of two or three per school kitchen, have an average thermal efficiency of 44.8% and an average firepower of 32.78 kWth.

Before the project, parents found it challenging to supply the 2kg of fuelwood per day per schoolchild required for the canteen. However, thanks to the project, children residing in deforested areas no longer fear attending school due to the lack of cooking wood, and the attendance rate has increased from 75-85% to 98%.

From January 25, 2016, to December 31, 2018, the project activity installed 940 institutional improved cooking stoves (IICS) in 284 schools spread across 16 communes in 4 provinces (Bubanza, Bujumbura, Cibitoke, and Gitega) in Burundi. These stoves were supplied with 12,631 tonnes of renewable biomass briquettes, benefiting 213,240 students based on the 2018/19 school population.

This project reduces GHG emissions and also provides many sustainable development benefits to the host communities and country including:

- ✓ Reduction of CO2 emissions.
- ✓ Decrease expenses for firewood (or respective working time to collect the same), and thus reduces a household's poverty.
- ✓ Reduces and prevents diseases due to reduced health damaging air pollution (asthma, cancer, etc.).
- ✓ Centralizing the supply of free biomass briquettes to all schools.
- ✓ Crop/timber producers can earn additional income by selling biomass waste to the project participant.
- ✓ Creating new long-term and short job opportunities including income generation.
- ✓ Educational services are enhanced. Parents (and sometimes their children) do not have to collect firewood for the school kitchens anymore.
- ✓ More efficient cook stoves.
- ✓ Significant reduction of deforestation.
- ✓ Protection of species diversity.
- ✓ Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries.

