



Sustainability action · Project Water

Improved Cookstoves and Water Filters, Guatemala

By making affordable water filters and improved cookstoves available to households in Guatemala, the project aims to reduce the costs of fuel wood plus the incidences of respiratory and water-borne diseases.

Project

In 2009, The United Nations Development Programme (UNDP) and The World Health Organization (WHO) estimated that every year in Guatemala 1,200 children under five die of pneumonia and 300 adults die prematurely of chronic obstructive pulmonary disorders resulting from traditional solid fuel use fires.

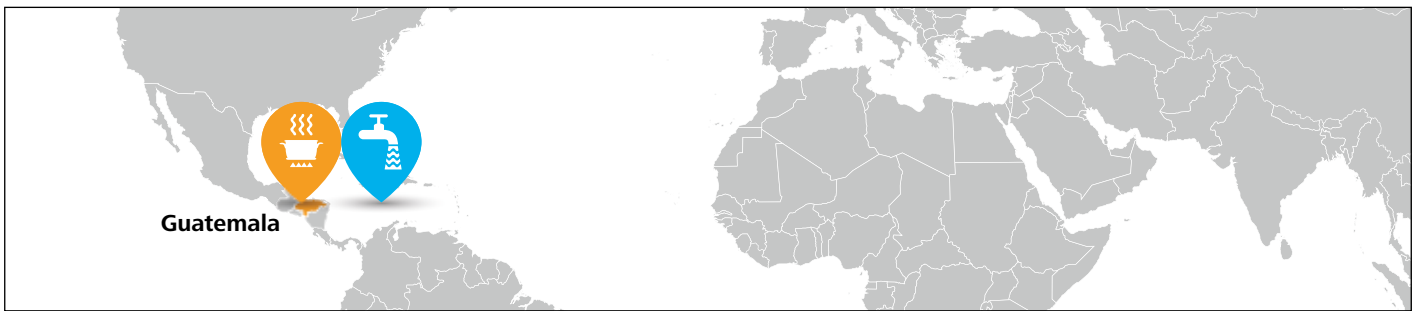
The high-quality, affordable, improved plancha wood stoves which are installed as part of the project replace inefficient traditional three-stone fires and significantly reduce the amount of indoor air

pollution caused.

The water filter treats two litres of water per hour and removes 99% of pathogens, making it safer for drinking and cooking. The water filters and improved cookstoves are sold to households by Ecofiltro and a local NGO, Socorro Maya. Carbon finance enables them to be made more affordable to low-income households with an 18-month payment plan that allows households to access interest-free loans.

The project helps households save time from cooking and collecting wood; an estimated 30 minutes per day from time typically spent on cooking is saved, which women can allocate to other activities. There is increasing demand for these technologies across the country and the material sourcing, manufacturing, distribution and maintenance has a positive impact on economic growth.

Checklist	Additionality and permanence	3 rd party verified	Transparency	Annual CO ₂ -reduction	Social and environmental benefits	Marketing material
Project 301 699	According to the rules of the Gold Standard	By ERM Certification and Verification Services	Provided by Markit Environmental Registry	60,000 tCO ₂ e	As documented in our database	High resolution pictures available



Location

The project is first being implemented throughout Alta Verapaz, Huehuetenango and San Marcos Departments. It will initially focus on developing within these three Departments and then aims to expand nationally once the project's two products have been widely implemented. This project improves the well being of those most in need by targeting rural and peri-urban populations in a low-middle income country.

Project achievements

Socio-economic impact

- 40,000 Guatemalan families (225,000 people) have eliminated indoor cooking fires and now have efficient Cookstoves and bacteria free water filters.
- Financial savings due to a 70% reduction in firewood purchases are equal to \$19.4 million USD
- Elimination of toxic smoke (lungs, eyes), burns from indoor open cook fires and bacteria laden drinking water saves \$5.5 million USD in medical costs.
- Women's empowerment from 2.5 hours per day freed up from lower wood collection, means 559,000 total hours saved up to 2015.
- Pre-natal Vitamins were distributed to 79,000 women
- 800 staff is employed throughout the supply chain in both temporary and permanent roles.
- 219'557 people were impacted by the changes the project brought up to 2015.

Environmental impact

- Decreasing fuel wood saves 254,000 trees every year.
- Less fuel wood use eases the burden of overuse on forests and subsequently improves deforestation rates and the corresponding threat to biodiversity.
- Limiting the deforestation can also minimize the risk of landslides and the negative impact on agricultural yields from soil erosion.

