



Water purification filters, Kenya

Fuel use from increasingly scarce firewood is a growing problem all over Africa. This carbon financed, first-of-its-kind clean water project addresses deforestation, carbon emissions and health issues.

Location



Known as a top tourist destination for safaris and wildlife, remote parts of Kenya continue to be impacted by water shortages, poverty and disease.

The LifeStraw water filter project uses Swiss technology and addresses deforestation and health issues in a rural region in the westernmost part of the country. Over 600 distribution sites have been set up in a region covering 19 districts of the Western Province.

Project



In western Kenya residents gather water from sources that contain dangerous microbes and use it for drinking and sanitation purposes. This leads to diarrhoea and other water-borne diseases and is the third largest cause of death in Kenya among children and adults (according to World Health Organisation data). The prevailing practice is to use wood fuel to boil water for drinking and bathing, which is a strong driver for deforestation. In addition, the heavy burden of wood collection is mostly conducted by women and children, exposing them to health dangers and often keeping children away from school.



This unique project involves the distribution of nearly one million LifeStraw Family Units, serving over four million people. The filters effectively treat contaminated water and reduce the need to use wood (which in this case counts as non-renewable biomass) to boil water. With the assistance of carbon finance, this project is economically sustainable and significantly improves public health. Carbon finance is important because hardly any family in the target region earns enough money to purchase the relatively expensive filters.

One *LifeStraw* Family Unit purifies 18,000 litres of water over a period of three years (calculated as providing 4.1 litres of water to four people every day for the period). During the monitoring periods, surveys will assess how much the filters are being used (which will determine the actual emissions savings) and when the filter unit must be replaced. Filter replacement after three years is factored into the project design.

Project achievements



Socio-economic impact:

- The project lowers the incidence of water-borne disease in western Kenya – the third largest killer in the country.
- The project creates employment (e.g. jobs distributing the filters and monitoring their use).
- The avoidance of wood fires for boiling water reduces exposure to smoke that contains hazardous air pollutants, improving the health of mothers and children.
- The project saves time and financial resources formerly spent on gathering or buying wood.



Environmental impact:

- The project is reducing baseline deforestation levels, saving forests and wildlife habitat, and improving the water storage capabilities of the soil.
- The project is reducing the number of smoky fires and improving air quality.



Checklist Project 301 220



The Gold Standard®
Premium quality carbon credits

✓ Additionality and permanence:	according to the rules of the Gold Standard
✓ 3 rd party verified:	by ERM
✓ Transparency:	provided by the Gold Standard Registry
✓ Annual CO ₂ -reduction:	2 Mio. tCO ₂ e
✓ Social and environmental benefits:	as documented in our database
✓ Marketing material:	high resolution pictures available