



CLIMATE CERTIFICATE 2019

CEMAsys Climate CertificateTM is hereby issued to Sparebanken Sør which has purchased carbon credits for voluntary offsets of its own operations with a total emission of **222 tCO2e**.

The project has been approved by the Gold Standard Foundation (GS) and is called VER (Verified Emission Reduction). The reduction of greenhouse gases is performed in project **GS 1385** - Energy Efficiency and Improved Clean Burning Cookstoves in Ghana. In addition to the climate effect, the project has positive health and economic benefits.

The project is according to the UNFCCC' guidelines and methodology, which guarantees the reduction of greenhouse gas emissions and supports sustainable growth in developing countries. When a carbon credit is issued, the reduction of greenhouse gas emissions has already taken place. Without the Gold standard funding scheme, the project would not have been proven economically viable and hence not realized.

The VERs purchased by Sparebanken Sør is registered in the Gold Standard Registry for Emissions Trading and is hereby retired from the market. The VERs can consequently never be used again.

For more information please visit www.goldstandard.org and the GS Project Registry.

Oslo, 16. August 2019

Per Otto Larsen



For more information about CEMAsys, visit www.cemasys.com

Improved cookstoves in Ghana – Gold Standard project



The primary objective of the project is to significantly reduce wood fuel consumption of low income Ganesh households by providing them with affordable improved cookstoves in the Ashanti region in Ghana. The improved cookstoves can replace traditional stoves, that expose them for toxic smoke and gas from burning wood while cooking.



PROJECT TYPE

Improved efficiency from reduced consumption of wood as fuel

PROJECT LOCATION Ghana, Ashanti Region

ANNUAL CO2 REDUCTION 220 000 tonnes CO2e

SITUATION WITHOUT PROJECT

Traditional cookstoves that expose users for toxic smoke and gas from burning biomass will remain the main source of fuel for households for a long time

SDB CONTRIBUTION



PROJECT STANDARD



The project aims to contribute to the socially, economically and environmentally sustainable development of the region by making efficient cookstoves widely available and educating the population about their benefits.

The social benefit of the project is that it creates jobs for local people, with employment of both women and men in the region. They are educated in the health benefits of using clean-burning stoves, and employed in the production of stoves. This gives locals a livelihood, with wages that are 80% higher than the minimum wage. The stoves are produced locally from scrap metal and sold at subsidized prices. The improved stoves are 40% more energy efficient than traditional stoves, and reduce consumption of wood charcoal. The project contributes to reduced demand and thus to less deforestation. A significant proportion of annual household budget is spent on the purchase of charcoal. By reducing the need the project also reduce expenses for a family accordingly.

More efficient stoves provide health benefits by allowing less carbon monoxide and toxic fumes inhaled. Here, especially for women and children who have the traditional responsibility of the household. Surveys show that the project has provided cost savings and improved health for those that adopt the stoves.

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