



Improved cookstoves - better for health and the environment

Improved cookstoves, Countrywide, Zambia

In Zambia, household air pollution is one of the biggest health risks. The reason for the pollution is often cooking over open fires. Only 17 percent of the population uses cookstoves, which is more efficient and better for human health and the climate. Therefore, this climate project distributes improved cookstoves in Zambia to households that use open wood fires as their energy source. In the process, local jobs will be created and approximately 45,000 households per year will have access to an improved cookstove.

The improved cookstoves burn biomass fuels more efficiently, reducing greenhouse gas and particulate matter emissions. This saves approximately 429,490 tonnes of CO₂ per year and significantly improves indoor air quality.

How improved cookstoves contribute to climate action

According to a statistic from the World Health Organization (WHO, 2022) around a third of the global population still relies on un-safe and environmentally harmful cooking methods. This includes, for example, cooking over open fires or using polluting cooking fuels, such as coal or kerosene. Improved cookstoves tackle this problem by using thermal energy more efficiently. Depending on the model, an improved cookstove can reduce fuel consumption by up to 70 percent, which significantly saves CO₂ emissions and can lower the pressure on local forests as less firewood needs to be harvested.

Improved cookstove projects allow the distribution of the - often simple - devices made from metal or clay to households, small enterprises or community facilities. Especially for households, this has an impact beyond the CO₂ reduction: better indoor air quality decreases respiratory diseases and families can save time and money as less fuel is needed. Improved cookstoves projects in the ClimatePartner portfolio are registered with international standards.



Contribution to the UN Sustainable Development Goals (SDGs)

SDG 3 · Good Health and Well-Being

Households are relieved of health hazards due to the much lower smoke emissions from the cookstoves.

SDG 5 · Gender Equality

Especially women's everyday life is made easier, as time can be saved on cooking and collecting firewood.

SDG 7 · Affordable and Clean Energy

Households gain access to clean energy with the improved cookstoves.

SDG 8 · Decent Work and Economic Growth

Approximately 30 people a year will find local employment through the project.

SDG 13 · Climate Action

In total, the project saves approximately 429,490 tonnes of CO₂ annually.



Project standard
Gold Standard VER (GS VER)

Technology
Improved cookstoves

Region
Countrywide, Zambia

Estimated annual emission reductions
429,495 t CO₂e

Verified by
Carbon Check (India) Private Ltd.

Validated by
Earthood Services Private Limited

Further information
www.climatepartner.com/1436