

# Back to the Green Island with Efficient Stoves in Madagascar



Benjamin Rakotovaomanana on completion of a clay combustion chamber for schools. Photo: Angela Zimmermann

**In order to reduce CO<sub>2</sub> and counter the rapid deforestation on Madagascar, myclimate supports the manufacture and distribution of efficient cook stoves. People save time and money and benefit from better indoor air and biodiversity benefits from less pressure on forests.**

Forest loss is an urgent problem in Madagascar. Already 90 per cent of the original forest area has been lost. This has a dramatic impact on the island's biodiversity, where more than 90 percent of the animals and about 80 percent of the plants exist only in Madagascar. For example, 94 percent of the lemur species are considered threatened with extinction. The reasons for deforestation, apart from slash and burn, are cooking with wood and coal. However, 97 percent of Madagascar's households cook in exactly this way. This is where the project initiated by a Swiss woman comes in.

**ADES founder Regula Ochsner was a development worker in Madagascar from 1972 to 1975. When she visited the country in 1998, she was dismayed by the rapidly progressing deforestation and decided to do her utmost to preserve the forest in Madagascar.**

## Project and implementing partner

To slow down deforestation, the Swiss-Madagascan non-profit organisation ADES (Association pour le Développement de l'Energie Solaire) produces climate-friendly cookers in Madagascar and sells them to the local population at a reduced price. While the organisation began building solar cookers in 2001, it has also been producing energy-saving cookers since

## Project type:

Efficient cook stoves

## Project location:

Madagascar

## Project status:

In operation, credits available

## Annual CO<sub>2</sub> reduction:

469,066 t

## Situation without project

Higher consumption of non-renewable firewood and charcoal

## Awards



**Brava  
Gemeinsam gegen  
Gewalt an Frauen**  
Ehemals TERRE DES FEMMES Schweiz



## Project standard

2010 and was able to register the CO2 savings by the international certifier Gold Standard from 2012 on with the help of myclimate. The energy-saving cookers for wood and coal met with great demand and soon became ADES' main product. Since the number of efficient cookers produced far exceeds the number of solar cookers in the meantime, it was therefore decided that only efficient cookers from this Gold Standard project would generate CO2 certificates, even if solar cookers continued to be supported and distributed.

**We were so thrilled with our first energy-saving cooker that we also gave our children, who live in the town of Ambovombe, one each. We even gave a cooker to our son, who is studying in faraway Fianarantsoa. His flat there is very cramped and all the smoke from cooking has caused him lung problems. Thanks to his new energy-saving cooker, this has improved.**

**Tsinaherina Sahambo has bought the 500,000th cook stove**

### **Efficient stoves for households, restaurants and institutions**

The product range consists of various models of solar and energy-saving cookers for private households, restaurants, company canteens, street kitchens and social institutions such as schools, homes and hospitals. The efficient cookers reduce firewood or charcoal consumption by 50 to 70 percent. Solar cookers do not require firewood for the cooking process. The savings allow people to make significant financial savings and reduces the time spent collecting wood. Low-smoke cooking with energy-saving cookers protects the health of women and children in particular, who usually cook in small enclosed rooms.

### **Distribution of the efficient stoves**

ADES operates various production and sales centres to reach people in different regions of the island, which is as big as Germany and Great Britain together. Additionally, hundreds of resellers have an income thanks to reselling the energy efficient cook stoves.

**I have two sales outlets: one in Ambohimambola and one in Ankadimbahoaka. In the reseller training, I learned sales and management techniques. The sale of cookers provides income that makes it possible to earn a better living.**

**RASOAMBOLATIANA Floriane, Reseller**

### **Environmental awareness-raising and reforestation activities**

ADES continuously conducts various events on site to sensitise th

**Gold Standard®**

**VER**

### **Impressions**



Different types of locally produced stove models are available. Photo: ADES



«We use less charcoal than before.» Luc Rado Rabotoson, project employee, with his wife Eléonore and daughter Alicia. Photo: Angela Zimmermann



Resellers like Francine have an income thanks to reselling the energy efficient cook stoves. Photo: Angela Zimmermann



Ms RASOAMBOLATIANA Floriane, retailer in Ambohimambola. Photo: Hajarivony Rindra

population to environmental and health protection, healthy nutrition and wood-saving cooking. With an innovative environmental education programme, the organisation brings school children and their teachers closer to the local flora and fauna and motivates them to behave in an environmentally friendly way. The organisation is also involved in reforestation. Together with partner organisations and village communities, ADES implements larger reforestation projects to preserve the fertility of the soil. Education and reforestation is not financed by CO2 certificates, but it is an important part of the project.

### Monitoring and verification of the project

ADES has its own monitoring team to check the use of its stoves. Users are asked about their cooking behaviour (kitchen survey). Each cook stove has a serial number and a barcode that the organisation uses to track its distribution. In annual audits, the cooker sales are checked by external experts.

### This project contributes to 9 SDGs (as of end 2022):

Find out how myclimate reports these SDGs in our FAQ.

The following SDGs are verified by the Gold Standard:



People benefit from lower fuel expenses. A household saves 23 euros and 431 hours per year.



Mainly women and children benefit from better air quality.



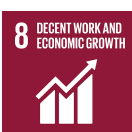
During 1089 school visits over 108,429 pupils and teachers have been sensitized for climate protection and clean cooking.



Especially women and girls have to spend less time collecting fire wood and maintaining the cooking fire.



8 million people benefit from efficient and cleaner cooking, with 370,000 efficient cook stoves produced and sold.



265 permanent employees and various work experience offers. Another 143 jobs with local suppliers and around 200 independent stoves retailers.



9 different stove models are being locally produced with local material.



Each stove saves around 2 t CO<sub>2</sub> per year and 2.5 t of firewood or 0.5 t charcoal.



3.7 million tonnes of wood saved (as of 2022)