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SOLAR COOKERS IN BOLIVIA

SOUTH AMERICA



PROJECT CONTEXT: THE HARMFUL EFFECTS OF TRADITIONAL COOKING METHODS

In Bolivia, food is mainly cooked using wood charcoal, gas or dried cow dung.

Due to a lack of ventilation in homes, this cooking method has serious health consequences.

Every year, the use of wood-burning stoves for cooking causes 4 million deaths, i.e. 1 death every 8 seconds (Source WHO, 2019).

Women and children are most directly affected by smoke emissions in the home. It also falls to them to spend time, which would otherwise be spent at school and work, cooking or collecting wood, the most widely used fuel. Furthermore, gas is very costly for most families; firewood is the main alternative, which causes mass deforestation and an increase in atmospheric pollution.

A SUSTAINABLE SOLUTION BASED ON A RENEWABLE ENERGY SOURCE

Faced with these life-threatening problems, the distribution of solar cookers helps reverse the negative externalities of wood-stove cooking.

A solar cooker is a box made of insulated wood, inside of which is an aluminium box, and the exterior of which is double-glazed to produce a greenhouse effect. This enables it to reach temperatures of between 150 and 200°C. It allows uniform cooking with no risk, and can even be left unattended. It requires only 20 minutes of sunlight to work properly, and thus can be adapted to a very large number of geographical areas and used in any season. The distribution of solar cookers limits the health impacts of wood-stove cooking as solar cookers release no noxious smoke. They also help reduce the pressure on Bolivian forests and guarantee access to a clean, renewable and sustainable resource.

OUR FIELD PARTNER

In order to distribute the solar cookers to those most at risk from the harmful effects of traditional cooking, the GoodPlanet Foundation has joined forces with a partner company active in Bolivia, INTI Energies Solidaires. INTI is in charge of coordinating the project on a local level thanks to its partner teams based in the field using the "sun to work towards development". It has been developing expertise in solar and ecological cooking over the last 16 years in the Andes, Africa and France. Since 1999, it has enabled the distribution of more than 23,000 solar cookers and avoided more than 115,000 t CO2 eg. in the Andes.





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OVERARCHING OBJECTIVES OF THE PROJECT FROM 2007 TO 2019

This project, launched in 2007, meets the following key objectives:

- Enhance the quality of life of rural populations by reducing the time spent collecting wood and improving the sanitary conditions of homes
- Contribute to the fight against climate change by reducing deforestation and the use of fossil fuels

RESULTS OF THE PROJECT FROM 2007 TO 2019

Between 2007 and 2019:

- 4,755 solar cookers installed
- 1 tonne of CO₂eq. avoided every year by the use of each solar cooker
- Wood consumption reduced by 58%
- Gas consumption reduced by 57%

PROJECT DEVELOPMENT IN 2021

This year, following the successful impact of the distribution of solar cookers, the GoodPlanet Foundation and INTI Energies Solaires decided to take the project one step further and ensure its sustainability among beneficiaries.

An economic aspect was thus integrated into this project: incorporating income-generating activities for women.

The specific objectives for consolidating this project are as follows:

- Develop a **network of local women ambassadors** for solar cooking to increase the use of this type of device
- Help women in the creation of income-generating activities thanks to solar cookers
- Increase cooking energy autonomy for 200 vulnerable families and offset CO₂ emissions







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CLIMATE CONTRIBUTION

This project is funded thanks to the purchase of carbon credits generated by the carbon offsetting project run from 2009 to 2018. Carbon credits generated by this project are Gold Standard certified. The Gold Standard Foundation not only certifies reductions in emissions of tonnes of CO₂ eq. but also ensures that the project respects the principles of sustainable development.

While Gold Standard certification is the most demanding procedure in terms of carbon finance, it constitutes a real guarantee for credit buyers.

Emissions are reduced by substituting fossil fuels for solar energy. These reductions are evaluated at 1 tonne CO2 eq. avoided per year per cooker and are checked annually.

Thanks to voluntary carbon offsetting, more than 19,000 people in Bolivia benefit from clean, renewable and sustainable energy.

By offsetting your emissions with this project, you provide financial support to:

- Monitor existing installations
- Increase the number of beneficiaries through the distribution of additional solar cookers



PROJECT IMPACTS

Environmental impacts



Combating climate change through reduced use of fossil fuels



Protection of biodiversity through reduced deforestation



Soil protection and prevention of erosion

Socio-economic impacts



Job creation and reduced poverty through transfer of know-how



Reduced health risks for women (decreased indoor air pollution)



Improved education and schooling for children

In partnership with:

