Solar Panels for Education and Quality of Life in Ethiopia and Kenya

The installation of photovoltaic cells on the roofs of Ethiopian and Kenyan houses for electricity production gives families access to lighting and improves the livelihoods of people living in the rural regions of Ethiopia and Kenya. The use of solar lighting instead of kerosene lamps has positive effects on people’s health and leads to reductions of greenhouse gas emissions.

The project’s objective is to supply a high number of villages with Solar Home Systems to produce electricity for lighting at home. Over 50 per cent of the population in the rural areas of Ethiopia and Kenya does not have access to electricity and therefore experiences numerous limitations at nighttime.

Once the sun sets usually between 6 and 7 o’clock, the only source of light is a dim kerosene lamp producing health-hazardous smoke. Due to the lack of light, social time, housework and further any educational activities for the children are restricted in the evening. By substituting the poor kerosene lamps with strong solar powered LED lights, environmental, social and economical benefits can be achieved.

The light has enhanced security. My wife can now cook outside without fear. Our livestock used to be eaten by lions and hyenas, but now this light has really helped keep wildlife away.

Nkaanyu Tekero, farmer in Noomau, Kenya

Education and training of local people is a key part of activities of the Solar Energy Foundation. To have well-trained personnel available who is able to professionally install and maintain the Solar Home Systems in Ethiopia and

Gold Standard

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Awards

Impressions

Clean energy for very remote rural households.
Kenya, the “International Solar Energy School” has been founded. After their graduation, five “Technicians” found a new Solar Center in a village and are responsible for the provision of its inhabitants with Solar Home Systems annually. The first Solar Technicians have graduated in March 2008, since then 10 Solar Centers have been opened and more than 96 solar technicians have been trained. Through this approach, many villages are reached and the know-how is spread around the country.

Nkaanyu Tekero, farmer in Noomau, Kenya

There are four different kinds of solar products offered differing in their power output and application. The solar lanterns and Solar Home Systems have been adapted and tested to fit the lives in rural Ethiopia and Kenya. To assure that every individual household finds a suitable lighting model for its needs and its financial situation, the small portable solar lanterns are sold directly by cash, where as the Solar Home Systems and other larger systems are sold by cash or credit and may be paid back over a specified period of time. The respective price takes into account the income level and ability to pay of the rural communities.

Have a look at two foto-albums on myclimate-Facebook (first and second one)!

This project contributes to 7 SDGs (as of end 2022):

Find out how myclimate reports these SDGs in our FAQ.

The following SDGs are verified by the Gold Standard:

1. **Good Health and Well-being**
   - 141,696 persons benefit from reduced air pollution from kerosene fumes contributing to improved health

2. **Quality Education**
   - A solar home system increases children’s study time by 2 hours per day and therefore helps to improves school grades. Over 250 women, men and youth trained by the project locally.

3. **Gender Equality**
   - The programme empowers women by providing green jobs and encouraging solar-powered businesses run by women. Over 32% of employees are women with equal opportunity to gain skills as men.
44,383 homes benefit from clean and efficient lighting and energy.

264 locals employed by the project (Kenya and Ethiopia)

A solar home system saves on average 411 kg CO₂ per year.

These SDGs have been approved by myclimate:

25,810 households have access to appropriate new clean and efficient technology, saving USD 68 and 77 liters of kerosene and USD 31 on mobile charging costs per household per year.