Solar Panels for Education and Quality of Life

Clean energy for very remote rural households.

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.

28,593 Solar Home Systems installed
91 jobs created
6.6 million litres of kerosene saved

Project type: Solar
Project location: Ethiopia, Kenya
Project status: In operation, credits available
Annual CO₂ reduction: 13,976 t

Situation without project
Use of kerosene lamps for lighting

Contribution to the SDGs

Gold Standard
VER

Awards

Ashden Sustainable solutions, better lives

Impressions

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
Educational 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 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.

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 photo-albums on myclimate-Facebook (first and second one)!

**Impacts and benefits achieved so far:**

- 28,592 Solar Home Systems installed
- 91 jobs created
- 6.6 million litres of kerosene saved
- 147,500 people benefit from access to lighting, improved livelihoods and better health
- Winner of Ashden Award 2009 and European Solar Prize 2017

![Light while cooking and improved indoor air quality.](image1)

![Installation of a Solar Home System in the village.](image2)

![The possibility to read is important for a good education.](image3)

![Reading in the evening with the LED lamp.](image4)