Cost savings

Solar lights can completely eliminate the need for kerosene lanterns in households. The cost savings for customers can be significant, as families may spend 10 to 25 percent of their monthly income on kerosene oil. For a typical farmer or shopkeeper, solar products will pay for themselves in as few as two months, meaning customers will save money every week for years to come.

Income generation

The bright and reliable light from our products supports incomegenerating activities such as farming and retail. A United Nations Development **Program study** demonstrates that household businesses with improved lighting have up to a 30 percent increase in income due to increased productivity at dusk and in the gloom of the rainy season. Solar light users have reported an increase in monthly income by as much as 50 percent from the extended work hours.



Better study environment

The poor light quality and noxious fumes of kerosene lanterns hinder the ability of children to study effectively. One of the boys whom Etatu sponsors suffers from asthma. His kerosene lamp worsened his condition.

Solar lanterns are bright enough to facilitate longer and more effective studying hours, which directly lead to increased learning and higher test scores. Solar light users share how their children, who previously often studied less than one hour per night, are now able to study as much as four hours per evening with a solar lantern. Moreover, a World Bank project study shows pass rates of an entire school increased from 57 percent to 100 percent after students studied with bright solar lighting.

Reduction in carbon emissions

According to Lawrence Berkeley National Laboratory research, the annual greenhouse gas emissions from fuel-based lighting in developing countries is nearly 200 million tons. A single kerosene lamp emits nearly half a ton of CO₂ over a lifetime of 5 years (UNFCCC). Every lantern purchased can completely replace one or more kerosene lamps, contributing to global carbon emissions reductions on the scale of hundreds of thousands of tons.

Pictured are Ali with a kerosene lamp and Hassan with a solar light. They were each given a solar light while at secondary school. Ali's asthma has since improved.





Healthy and safe homes

Kerosene lamps are a key contributor to indoor air pollution, which is documented to have disastrous health effects, ranging from tuberculosis to cancer. Kerosene lanterns have also caused countless deaths by ingestion, burn injuries and related complications, and fatal fires. At a minimum, kerosene users experience diminished eyesight and visual health. Solar lanterns are extremely safe and use superbright LEDs that do not emit any pollutants.

Solar lights in Mwaembe

Etatu has distributed solar lights to over 500 school children at Msambweni Primary School, all the children of the Msambweni Orphans' Programme and many other individuals and families who particularly need them, such as children you have asthma.



The help we have received in being able to do this has been invaluable. We would like to thank our donors as well as Sollatek in Mombasa who supply d.light products and Sunlite in Nairobi.

J Lindgren July 2014