

# SOLAR LANTERNS

## What is this Action Sheet about?

If you have no electricity supply or one that is unreliable, and you would benefit from a cleaner and brighter source of light, then you might like to hear about solar lanterns. Although the lantern has to be paid for, lantern owners soon start to see a saving because you will need to buy less kerosene and candles.

Margaret from Kenya was part of a Practical Action (ITDG) pilot project for the Glowstar solar lantern, designed by ITC and manufactured by Sollatek: "Initially it helped me because I used to buy kerosene more frequently than now, so my costs have gone down. Unless I use my small lamp for the kitchen, I don't have any need for kerosene any more. In a month we would spend 120 Ksh on around five litres of kerosene. Now I spend only about 40 Ksh per month."



(Image: Practical Action)

## How do solar lanterns work?



Glowstar Lantern  
(Image: Practical Action)

Photovoltaic technology, known as Solar PV, transforms the energy of sunlight into electricity. When the Glowstar solar lantern is plugged into a solar photovoltaic cell, its rechargeable battery stores the electricity produced so that it can be used to light your home or power a radio. When fully charged, the lantern will give light for 4 to 5 hours, and the radio will run for 15 hours. If both are used at once, the listening and lamp time will be shorter. Although it may take longer, the photovoltaic panels can still charge the solar lantern on a cloudy day.

## What are the benefits?

Light from a solar lantern extends the hours of the day available for reading, sewing, cooking, study and many types of cottage industry. Margaret said: "As soon as we got this lantern we could see that it was better. When the lantern is on we can't see that the kerosene one is on. When we are doing something outside it lights my way. And when my children are doing their homework it helps them too - they get about two hours of work to do."

## And how much do they cost?

In June 2005, the normal price for a Glowstar lantern in Kenya was 6844Ksh (US\$86), plus 4600Ksh (US\$58) for the solar panel. Usually, the Glowstar lantern costs US\$114-149 depending on the import duty of the country. However, you might find a special offer price, and some companies selling the lanterns are planning to run farmers co-operative credit schemes and group lending schemes to help people pay little by little.

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## FOR MORE INFORMATION

### CONTACTS

Practical Action (formerly known as ITDG) – [www.practicalaction.org](http://www.practicalaction.org)  
[www.glowstar.net](http://www.glowstar.net)

### SOLLATEK offices in Africa

#### Angola

Cemtec LDA

#### Egypt

Sollatek Electronics Egypt Limited  
4, Mohamed Soliman AlGhanam  
From Mohamed Refaat,  
Al Nozha  
Cairo  
Egypt  
Tel + 00 202 6222 973  
Email: [seel@link.com.eg](mailto:seel@link.com.eg)

#### Ghana

*Sollatek Electronics (Ghana) Limited*  
29 Shikashika Street  
PO Box 8693  
Abelomkpe  
Accra  
Ghana

Tel: + 233 21 775106 Tel/Fax: + 233 21 773138  
Email : [Sollatek@Africaonline.com.gh](mailto:Sollatek@Africaonline.com.gh)  
<http://www.webstar.com.gh/sollatek/>

#### Kenya

Sollatek Electronics Kenya Limited  
P.O.Box 83831,  
Mombasa, Kenya  
Tel + 254 41 5486250/1/2/3 Fax + 254 41 5486259 email:  
[sales@sollatek.co.ke](mailto:sales@sollatek.co.ke)  
[www.sollatek.co.ke](http://www.sollatek.co.ke)

#### Nigeria

(Consumer Products - AVS, SVS, Guards etc)  
Far East Mercantile

(AVR's & Solar Products)  
Namoh Industries

#### South Africa

Sollatek South Africa

#### Tanzania

please contact our office in Sollatek Kenya

#### Uganda

Market Street  
Kampala  
UGANDA  
Tel +256 41 250526