

## CASE STUDY

<b>Project:</b>	Ghana Ministry of Education, National Literacy Project
<b>Country:</b>	Ghana
<b>Project value:</b>	\$2m
<b>Year:</b>	2004-2005
<b>Product:</b>	Sollatek Glowstar lantern

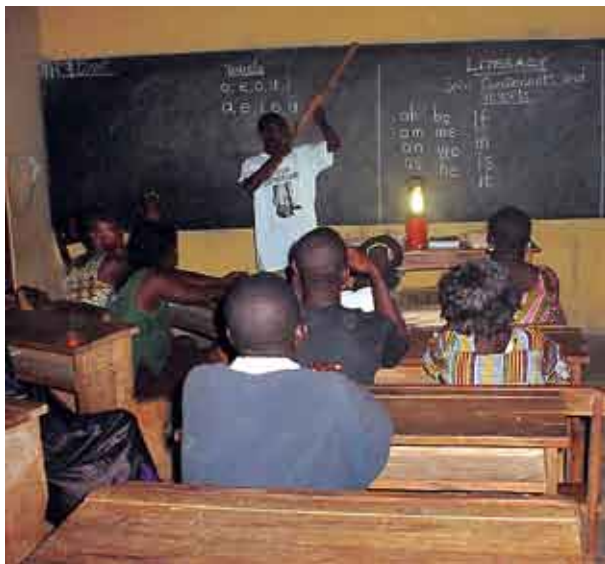


Sollatek™

THE SOLLATEK  
**Glowstar**  
A REVOLUTION IN LIGHTING

## Glowstar solar lanterns light up adult literacy classes in Ghana

Ghana's Ministry of Education has taken delivery of 15,000 Glowstar lanterns from Sollatek, specialists in solar power and voltage protection products. The Glowstars will provide a vital light source for evening adult literacy classes in rural areas of Ghana without access to a reliable electricity supply.



Ghana has a population of around 22 million, three-quarters of whom live on less than US\$2 a day, while over a quarter of adults cannot read and write. Functional literacy has been recognised by the Ghanaian Ministry of Education as vitally important in alleviating poverty and promoting the country's socioeconomic growth.

Designed as a low-cost, reliable and ecologically friendly product, Glowstar is a portable solar lantern providing up to 8 hours of bright light using a choice of three compact fluorescent lamps. Glowstar's rugged plastic construction ensures that it is highly durable, as well as rain proof, dust proof and insect proof. The unit's versatility is further enhanced by an auxiliary output providing 0.5A/12V which

could be used to power a radio or charge a mobile phone.

According to Maan Allos, Sales and Marketing Director, "In countries without a reliable electricity supply many people rely on kerosene lamps or candles to provide basic lighting, posing a potential fire hazard, or else expensive batteries. Glowstar provides a safe, easy-to-use alternative with zero running costs – ideal for enabling activities, such as Ghana's adult literacy groups, which need to take place in the evenings after dark."

*continued overleaf*

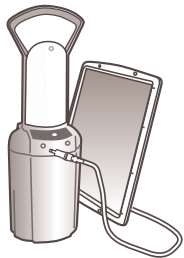


Founded in 1983 to exploit the patented design for an Automatic Voltage Switcher, Sollatek (UK) Ltd is now one of the world's foremost makers of specialist products to protect electrical and electronic equipment. Having become a major force in power protection products, particularly in developing countries, Sollatek turned to the field of renewable energy. Sollatek designs and produces solar power products and systems ranging from lights and batteries to complete turnkey solar energy systems for both domestic and commercial applications.

### GLOWSTAR FEATURES

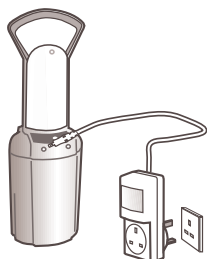
- Durable, tough, glass filled polypropylene high impact, plastic construction
- Rain proof (when vertical) , dust proof, insect proof
- Can stand in 160mm of water
- Maintenance free
- 10,000 hours lamp life
- True zero power consumption when turned off
- Operates in any orientation
- Temperature compensated charging method for full battery capacity and longer battery life
- Protection against deep discharge (inc. aux. output). Disconnects at 50% depth of discharge
- Polycarbonate, UV stabilised cover to protect lamp
- Sealed, high reliability switches
- Multiple LED indications
- No glass covers to break
- High reliability
- Attractive packaging
- Highly efficient inverter and control circuits
- Long life in storage and shipping
- Well protected electronics, electrically and mechanically
- All parts corrosion resistant
- HF light inverter technology
- Protection against reverse charge current
- 10 minute shutdown warning
- Long battery life. Battery capacity reduced to approx. 60% after 450 cycles, if fully used down to disconnection level every time. Longer life if not fully used every time
- Cigarette socket output available enabling mobile phone charging (Glowstar GS7 only)

**CHARGING MODES**



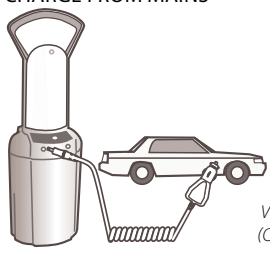
*SOLAR PANEL (OPTIONAL)*

**CHARGE FROM SOLAR PANEL**



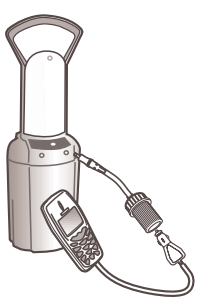
*MAINS ADAPTER (OPTIONAL)*

**CHARGE FROM MAINS**



*VEHICLE ADAPTER (OPTIONAL)*

**CHARGE FROM VEHICLE**



*12V OUTPUT SOCKET (GS7 ONLY)*

**CHARGE YOUR MOBILE**

**Other Sollatek Solar products**



Solar Energy Systems
Charge Controllers
Solar Lights
Solar Energy Kits
Batteries
Solar Modules
Solar lantern