



Daylight Solar

Project

1GOD 1FAITH 1Church Universe Custodian Guardians

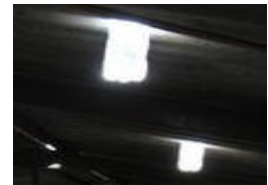
Built your own daytime Solar - light !

Daylight Solar Free energy, no carbon emissions, way of lighting up your home, shed, factory, warehouse,... during the day. Without electricity- using nothing more than plastic bottles filled with water & a small amount of bleach.



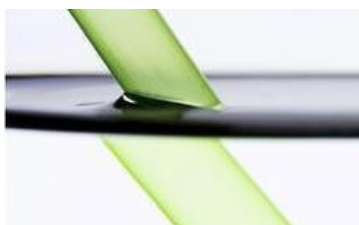
Take a 2l clear clean plastic bottle fill it 1/2 with water.
Add 2 cupfuls' of bleach to stop Algae from growing.
Top up bottle with water to rim & put on cap.
The lamps work best with a black cap.
Make a hole in roof.
Push bottle through hole, cap 1st.
Seal hole with polyester resin.
Enjoy light without any energy bills.
No electric shocks.

People in poor areas use bottle lights to grow food on small hydroponic farms. These lights are used to light factories, warehouses, ...



So how does it work? Simple refraction of sunlight.

What is Refraction?



Refraction is the bending of light, which is caused by a change in its speed. The speed of light is determined by the density of the substance through which it passes. Refraction occurs when light passes from one substance to another with a different density. In the case of the "Solar-light", sunlight is bent by the bottle of water & spread around the room.

How much energy do the lamps save ?

The plastic bottles are up-cycled in the local community, so no energy is needed to gather, shred, manufacture and ship new bottles. The household will be bathed in refractive light of 60 watts on a clear day, & the water in the bottle refracts the light 360 degrees to all corners of a 40 square meter room for less than a US dollar in total plus labor. Savings in electricity expenditure every month is at an average of USD \$6.00 / month.

The carbon footprint of manufacturing one incandescent bulb = 0.45 kg CO₂. Usage of a 50 watt light bulb running for 14 hours in daytime is still 0.77 kg per kWh. So 30 days is 16.17 kg a month or 200 kg a year.