

LED LAMP POWERED BY SALTY WATER DESIGNED IN PHILIPPINES

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In 2012 Aisa Mijeno, a young professor and researcher at the La Salle University (Philippines), designed the first prototype of the [SALt Lamp - Sustainable Alternative Lighting](#) powered by water and salt.

The SALt Lamp runs 8 hours on just 1 glass of salty water.

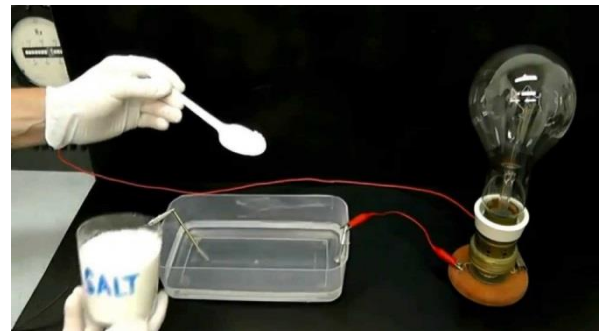
The SALt LED lamp relies on a galvanic cell battery in which the electrolyte solution consists purely of salty water into which two electrodes are placed. It burns for eight hours at a time running on only a glass of water and two teaspoons of salt and can go on this way for around six months. It also generates enough power to charge smart phones via the USB port on the side of the device. In addition ocean-water can also be used to operate the lamp.

The SALt Lamp is:

- Safe. There are no materials and components inside the lamp that may cause fire accidents. This lamp uses the science behind the Galvanic cell, the basis for battery-making, changing the electrolytes to a non-toxic, saline solution, making the entire process safe and harmless;
- Environmentally Friendly. It does not emit harmful gasses and leaves minimal carbon footprint making it very environmentally friendly. In disaster situations such as super typhoons, earthquakes, SALt Lamp can provide sustainable light source;
- Easy to Use. The salinity of ocean-water can power up the lamp giving you 8 hours of running-time. This innovation allows to store ocean-water in bottles and use them to power up lamps anytime, anywhere.

SALt Lamp is a cost effective solution designed to improve the quality of life of the populations living in islands and rural areas of the country. In Philippines like in so many other areas of the world, there is a lack of efficient light sources and the SALt Lamp is contribute to eliminate the sustaining cost in areas that rely on kerosene/battery powered lamps and candles as their main source of lighting.

The potential impact of this Lamp is very large considering that in the world there are 1.4 billion people living without electricity and as pointed out by the inventor of the lamp, seventy percent of the earth's surface is saltwater and we



still rely on other expensive means that are dependent on geography, climate, and fuel.

This is the reason the lamp has gotten the attention of not just local but [international competitions and received several awards](#).

Many public and private actors from Korea, Philippines, South Korea, Japan, Singapore, Malaysia, Netherlands and United States are interested in this invention and they will enable SALT to become a concrete system to harness green energy and a commercial reality by 2016.

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