

Duo create GravityLight: Lamp that runs off of gravity (w/ video)

13 December 2012, by Bob Yirka



(Phys.org)—London based designers Martin Riddiford and Jim Reeves have created what they are calling the GravityLight, an LED lamp that runs off of nothing but gravity. The purpose of the lamp is to provide people in third world countries with an alternative to kerosene lamps which cause burns and lung ailments to millions of people too poor to afford any other source of light.

The lamp is as simple as it is inexpensive. A cable hangs from a gear mechanism holding onto a plastic bag filled with dirt or rocks. The energy created by [gravity](#) pulling the bag downwards is enough to power an LED bulb for up to half an hour. Riddiford and Reeves have posted their creation on the fund sourcing site [indiegogo](#) and thus far [pledges](#) have doubled the \$55,000 goal.

The two note on their page that over a billion and a half people in the world today have no access to a reliable electricity source. When it gets dark, their only light source comes through burning wood, peat, or other biomass materials – the most popular by far, is kerosene. They also note that the

World Bank has recently estimated that up to three quarters of a billion women and children regularly inhale smoke from kerosene lanterns, which is they say, equivalent to smoking two packs of cigarettes a day – a situation that leads quite naturally to very high lung cancer rates. Also, millions of people are burned each year when kerosene lamps are accidentally upended. There's also the problem of carbon dioxide being added to the atmosphere – collectively about 244 million tonnes a year. All in all they paint a very dire picture. To help fix the problem, the two have spent the past four years looking for and building various lighting options and have now settled on their GravityLight.

Their lamp has no batteries and is made in a way the two say will last for a very long time. The weight that drives the lamp is free and collectable virtually anywhere and providing a lamp that doesn't have any recurring costs will allow, the two say, those that have relied on [kerosene lamps](#) to use the money they have been spending on fuel, for other essentials. The overall goal is an improved quality of life.

The two expect the GravityLight to originally sell for just \$10. After ramping up, they expect that cost to drop to just \$5.

More information:

www.indiegogo.com/projects/282006

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APA citation: Duo create GravityLight: Lamp that runs off of gravity (w/ video) (2012, December 13) retrieved 27 September 2020 from <https://phys.org/news/2012-12-duo-gravitylight-lamp-gravity-video.html>

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