

Solar power, kinetic energy turn on streetlights in Vegas plaza

November 14 2016, by Nancy Owano



(Tech Xplore)—Footsteps and the sun. The two key ingredients for Smart Street Lights, from EnGoPlanet. This month marks a big event for the New York based group, as it was announced that street lights powered by pedestrian footsteps and utilizing kinetic energy and solar energy, went up in Las [Vegas](#).

Megan Geuss in *Ars Technica* said EnGoPlanet has installed four streetlights in a plaza off the Las Vegas Strip.

The lights are a message that such moves can do their part in addressing climate change and providing clean tech alternatives.

"EnGoPlanet was created after the hurricane Sandy, during which half of Manhattan had no power for almost 7 days," said the group, in describing what motivated them. "The fact that one of the most important cities in world did not have a proper [alternative](#) to provide its citizens with energy for their basic needs was disconcerting. We decided to do something about it."

EnGoPlanet describes its lights as an "off-the-grid street lighting solution powered by solar and [kinetic energy](#)."

Video notes posted last month said these provide not just [light](#) but a WiFi connection, charging station and realtime data via Smart Sensors.

The video shows bright LED light and wireless charger (light is equipped with a charging station with 2 USB ports and wireless charging pad.)

Smart Sensors installed on the pole can collect useful outdoor data, said the company: temperature, air quality, humidity; data can be seen online in real time.

The lights can illuminate streets, parks, parking lots, corporate and

university campuses.

Geuss in *Ars Technica* said, "The streetlights are topped by a [solar](#) panel crest, and have 'kinetic tiles' on the ground below them."

The team said "We are using the most efficient solar cells currently on the market with the efficiency of up to [24%](#)."

"Kinetic pads are installed near our EnGoPlanet Smart Street Lights, which harvest energy from [pedestrians](#) footsteps every time someone steps over them, while specially designed solar panels utilize the energy of the sun."

According to EnGoPlanet, under 1 kinetic pad are 3 micro-generators. These create energy each time a person steps over them. "Depending on the pressure one footstep can produce from 4 to 8 [watts](#)."

The company also has a pitch focused on cost savings. "EnGoPlanet Smart Solar Street Lights are an effective replacement solution to existing grid-connected systems. It will eliminate electric bills and reduce monthly maintenance fees up to 75%."

The company said their lights are in several cities around the world. They have a project up on Indiegogo, called Light Up Africa. They aim to install lights in 10 villages lacking electricity. Proceeds will be applied to that [goal](#).

They said to produce, ship and install EnGoPlanet Smart Street Lights for 10 areas in Africa, they need to raise at least \$300,000. They said the money would go to for the production, shipping and installation of units.

Backers depending on the amount of their contributions will get various perks. The perks include a glow in the dark wristband, key chain with

LED and bottle opener, wooden USB Flash 4gb memory, t-shirt, hoodie, solar case for mobile phone, solar charger, backpack.

Moving forward, the team, in addition to the African village initiative, have not abandoned an agenda for the United States. They are still pitching reasons why intelligent solar powered [street lights](#) can be effective for many areas in the US beyond Vegas.

In a company blog posting on November 8, they said, "EnGoPlanet plans to talk with DOT [Department of Transportation] and to propose them a pilot projects where they would install these Intelligent Solar Street lights in several [areas](#) across the US."

More information: www.engoplanet.com/

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