

Naked Energy touts hybrid solar panel in tube design

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(Phys.org) -- A British company, Guildford-based Naked Energy, has come up with a “hybrid” solar panel that has generated much interest in the past weeks because of its design, function, and test results, comparing favorably to traditional solar panels. The solar panel is of the “hybrid” variety because it does two jobs at the same time. The product, called Virtu, can generate both electricity and hot water simultaneously. The company believes that with Virtu they have invented the right design and process to achieve an effective thermal transfer system.

The panel is in a vacuum tube configuration, The tubes have low thermal losses and will produce [energy](#) regardless of the climate they operate in, hot or cold, according to the company.



“The annual yield depends on the application, local climatic conditions and quantity of panels installed. For installations requiring high temperatures for thermally driven cooling or heat storage we are producing matching ‘thermal only’ vacuum tubes, which will be able to produce significantly higher temperatures.”

Virtu, developed by Naked Energy’s chief engineer Richard Boyle, has brought the company an opportunity to explore combined photovoltaic and thermal actions. The company’s patented “thermosyphon” technology harvests unwanted heat from the photovoltaic cell to heat up water. As a result of taking the heat away and cooling down the photovoltaic cell, it is possible to generate more electricity than conventional photovoltaic cells.



This is not the only hybrid panel on the market, but the company says its product has adjustable photovoltaic panels that could be placed on flat roofs, opening up opportunities that traditional panels — that need to be at a 45-degree angle — do not have.

Naked Energy, founded in 2009 as a renewable energy business, has been working over the years toward its ultimate goal of developing and commercializing a breakthrough solar technology. In 2012, they have reached a turning point. Reviewing Virtu, the Imperial College London found that the panels they [tested](#) can produce up to 46 percent more energy than the typical PV panel when the cells are heated to 65°C.

Naked Energy is prepared for more turning points. The company is

working closely with Prof. Peter Childs, an expert in heat transfer from Imperial College London, to further improve the efficiency of the [solar panels](#). Also, the company recently took off on a [trade](#) mission to the San Francisco, in association with the Technology Strategy Board, UK Trade & Investment and other private sponsors.

More information: www.nakedenergy.co.uk/

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