

Solar Power Is On A Roll, Literally And Figuratively

Source: treehugger.com

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[Lloyd Alter](#)

The Guardian has a series on innovators, and has picked up the story of John Hingley and Renovagen that Derek [covered a few years ago on TreeHugger](#). Now it is a reality: John Hingley of [Renovagen](#) has designed a solar panel that is flexible enough to roll up. [It's described in the Guardian](#):

The system uses copper indium gallium selenide solar cells (CIGS) that are bonded with a tensile fabric. The strength of the combined material can cope with being rolled in and out, said Hingley, and it can be in full operation a few minutes after it is deployed. “It is like a microgrid in a box. It has all of the components integrated into it that you need to run a 24 hour microgrid.”

[Renovagen Roll-Array Multi-Gen](#) from [John Hingley](#) on [Vimeo](#).

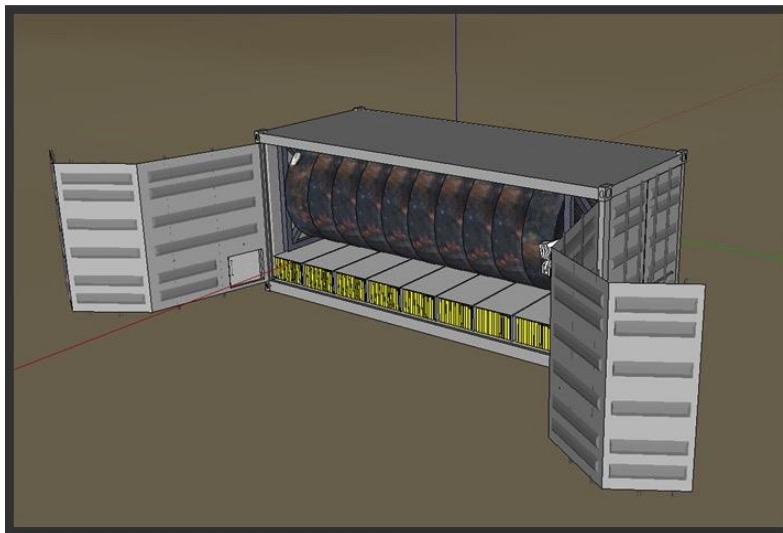
The reel fits into an air pallet sized container so that it can be transported anywhere by plane, trailer or even helicopter. Then you hook up your car (or get a few friends) and just pull it out of the box. The current design has a capacity of up to 18 KWp and comes complete with up to 53kWh Lithium Energy Storage system, fans for ventilation and cooling and filters on the air intakes to keep out the bugs.



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The markets include emergencies, festivals, mining companies and the military:

The protection of fuel convoys has resulted in large numbers of military deaths, Hingley said. “You have to protect the convoys, you have to protect the flights going in, so it can cost. The US army estimated that it can cost up to \$400 per gallon to deliver fuel to those bases.”



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The design can also be cranked up to shipping container size, generating up to 600KW.

The integration of the Renovagen RollArray technology into a side-opening 20ft ISO shipping container, combined with inverters and a large battery bank, creates an easily transportable self-sufficient solar power system capable of generating 10 times more power than competitive products. Deploying a huge solar array measuring 5 metres in width and up to 200 metres in length, this represents by far the largest containerised deployable solar array yet conceived.

More at [Renovagen](http://Renovagen.com).
