



Sustainable energy

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FAKE COTTONWOOD TREE GENERATES WIND-POWERED ELECTRICITY

 SUSTAINABILITY

A team of researchers from Iowa State University designed a tree that generates electricity when its leaves move in the wind.

As an adjunct to huge wind turbine fields, the Iowa State University research team's electricity generating tree could be used to power home appliances. Citing cell phone towers in Las Vegas that are camouflaged as trees as inspiration, scientists believe that such aesthetics could have their functionality doubled. Using thin plastic leaves modeled on the flat planes of cottonwood tree leaves, the biomimetic tree contains special plastic in the leaf stalks that release electricity when moved by wind.

Although the lab tree is very small, the researchers envision a much larger model containing tens of thousands of leaves becoming a viable option for people wanting a smaller amount of renewable energy. More work is needed to make the mechanical-to-electrical conversion efficient enough for market purposes.

The [wind-hydro plant](#) recently build in Germany is another example of finding new ways to make renewable energy more efficient and accessible, as are the [solar panels coated in graphene](#) that allow energy to be gathered even on rainy days. How else could sustainable energy solutions be combined for a more versatile consumer option?

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